

# Annual Report



Missouri Department of Conservation Fiscal Year July 1, 2006 to June 30, 2007

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his summary of the Annual Report highlights the Conservation Department's accomplishments and expenditures from July 1, 2006, through June 30, 2007. These accomplishments are based on the nine goals established in The Next Generation of Conservation.



Serving nature and you



# PLANTS & ANIMALS

#### Natural communities

We are emphasizing the restoration and management of productive natural communities. We actively managed habitat on 21,752 acres of grassland/prairie, 41,259 acres of marsh/wetlands, 580 acres of glades, 45,000 acres of forest, 9,250 acres of savannas and 15,977 acres of old field.

## Conserving all wildlife

MDC is leading the implementation of the Missouri Comprehensive Wildlife Strategy (CWS). CWS is a way of approaching conservation planning and implementation that integrates projects and initiatives with conservation partners, other agencies and private landowners. Grants and new money totaled at least \$5 million during FY07.

#### **Invasive** species

MDC worked with state, federal and non-governmental organization partners to complete and implement invasive species work plans. Staff completed the Missouri Aquatic

Nuisance Species Management Plan and drafted the Missouri Emerald Ash Borer Action Plan and the Emerald Ash Borer "frequently asked questions."



# CLEAN WATER

#### Stream Stewardship Trust Fund

The Stream Stewardship Trust Fund is available to restore, enhance and/or protect stream systems and associated riparian habitats. The program and funds are administered by the Missouri Conservation Heritage Foundation, and MDC staff apply for grants. In FY07, nine projects costing \$690,000 were approved to protect 70.1 acres of stream channel and 276 acres of riparian corridor.

#### Taum Sauk restoration

MDC is working cooperatively with several agencies to restore forest, fish and wildlife resources affected by the collapse of the Upper Taum Sauk Dam. Efforts focused on construction of a new stream channel through Johnson's Shut-Ins State Park, removal of clay and silt from Lower Taum Sauk Reservoir and the East Fork of the Black River, and flow releases from the lower reservoir. We also sampled habitat, fish, insects and other invertebrates to help evaluate effects on aquatic life and habitat.

#### Improving aquatic resources at Bagnell Dam

MDC joined other resource agencies and AmerenUE in efforts to determine how to design, construct and install a fish barrier net in front of the turbines of Bagnell Dam. There also have been collaborative efforts regarding water-quality enhancement measures to be taken within the operation of Bagnell Dam. Water quality and habitat improvements will be provided for the 82 miles of the Osage River below Bagnell Dam.



# **HEALTHY FORESTS**

#### Measuring timber usage

To determine the usage of timber from Missouri's forests, MDC foresters visited every sawmill, post mill, chip mill, pole mill and charcoal plant in Missouri. Determining the sustainability of Missouri's forest and calculating the economic impact of Missouri's forest products industry are just a couple of the potential applications of the information obtained.

#### Oak mast production surveyed

Oak mast is an important source of fall and winter food for many species of wildlife. The oak mast survey is conducted annually to provide an index for the availability of oak mast, giving an indication of what is in store for mast-dependent forest wildlife during fall and winter. In 2007 we sampled 3,847 oak trees. Mast production was poor this year, particularly in white oaks, which was attributed to the late-spring freeze.

#### Professional Timber Harvesters Program

The Missouri Forest Products Association and MDC jointly sponsor logger training courses aimed at educating loggers about forest management principles, introducing new techniques and concepts, and enhancing the safety of timberharvesting operations. More than 250 loggers have been through the program.



### **OUTDOOR RECREATION**

#### **Deer Hunting**

MDC has expanded opportunities for deer hunters. Unlimited antlerless deer permits for many counties, no-cost any-deer and antlerless deer permits for resident landowners, the Managed Deer Hunt Program, and additional urban deer harvest opportunities help maintain deer populations at herd levels desired by landowners and hunters.

#### Increased trout-fishing opportunity

The winter catch-and-release season at Bennett Spring, Montauk and Roaring River state parks was expanded from three days to four days per week. In addition, a new winter trout area was established at Spur Pond in Kirksville. Acquisition of the Bohigian Conservation Area provided new public access to 1.26 miles of the Mill Creek Blue Ribbon Trout Area.

#### Missouri Archery in the Schools Program

MDC, with the Conservation Federation of Missouri, became the Missouri coordinating agency for the National Archery in the Schools Program. The program is designed to teach target archery in fourth- to 12th-grade physical-education classes.

#### New hunters and anglers

Staff and volunteers provided more than 700 instructional programs in hunting, fishing, trapping and shooting sports to more than 45,000 people. We offered more than 1,000 Hunter Education classes to 29,000 students.



## CONSERVATION EDUCATION

#### Wildland fire-suppression training

MDC trained more than 565 local firefighters in fire behavior, suppression techniques and safety at no cost to the fire departments or the volunteers. We also provided instructors and logistical support for the Midwest Wildfire Training Academy.

#### Learning Outdoors School Program

In this pilot year, 33 middle schools with 2,431 students received grants to participate in the Learning Outdoors School Program. We also provided an additional 318 schools with conservation grants for outdoor classrooms, equipment and busing costs for field trips. Grants to schools exceeded \$185,000.

# Citizens discover, use and enjoy Missouri's outdoors

More than 1 million visitors experienced our conservation nature centers and shooting-range/outdoor-education centers. These facilities offered a wide variety of programs, with more than 300,000 participants.



### COMMUNITY CONSERVATION

#### Grants help volunteer fire departments

MDC, in cooperation with the U.S. Forest Service, provided more than \$281,000 in grants to more than 140 volunteer fire departments. These grants help fund protective clothing, equipment and training.

#### **Meat-donation program**

Conservation agents coordinate and support the Share the Harvest program with the Conservation Federation of Missouri, local charitable organizations and local meat processors. During FY07, approximately 6,580 hunters donated 322,500 pounds of venison.

#### **Community Assistance Program**

Through the Community Assistance Program (CAP) and the closely related Corporate and Agency Partnership Program (CAPP), MDC enters into agreements (usually 25-year) with cities, counties, state and federal agencies, businesses, foundations, schools and colleges to provide fisheries management at existing lakes and ponds, and to cooperatively develop and maintain facilities for anglers and boaters at lake and stream areas. MDC has agreements with 114 partners for the cooperative management of 146 public lakes (9,236 acres of water), 41 stream-access areas, four lake-access areas and six aquatic-resource education ponds.



### LANDOWNER ASSISTANCE

#### Technical assistance

Field staff provided service through approximately 20,062 rural and urban landowner contacts, including 9,665 on-site landowner visits. Staffers assisted landowners with habitat management plans. Staffers also answered 4,634 requests for wildlife nuisance and/or damage assistance, including 906 on-site visits.

#### Private lake and stream management

We responded to 7,579 requests for watershed, floodplain, riparian corridor and stream or lake management information and technical assistance on streams or lakes. We made 1,435 on-site visits and wrote 182 recommendation letters or management plans. Staff conducted 39 stream or lake management workshops attended by 1,176 people. We also coordinated or participated in 69 watershed-focused resource management projects.

#### Equipment grant program

MDC designed and initiated the Conservation Equipment Grant Program. The program targeted organizations that assist MDC with delivering private-land habitat programs and technical assistance to private landowners. We awarded approximately \$100,000 in grants to 12 separate organizations.



#### Online atlas improved

We made a comprehensive update to the Department's online

conservation atlas. Information about the features, facilities and recreational opportunities available on each of 1,000-plus conservation areas owned or cooperatively managed by MDC is available online. A companion regulations database, linked to the atlas, provides information on regulations and seasons relating to hunting, fishing, camping and other outdoor activities on each area.

#### Conservation area use

We improved horse trails on several MDC areas. The improvements have eliminated hazards to riders, provided for year-round horse-trail riding and reduced some erosion resulting from heavy public use.

#### Land management

We conducted habitat-management activities on approximately 150,000 acres of public land. Staff spent nearly 132,000 hours on area maintenance.

# ACCOUNTING FOR **DEPARTMENT OPERATIONS**

#### Listened to Missourians

We employ a variety of scientifically sound measures to assess public opinions, expectations and recreation participation. This information guides decisions about regulations and fish, forest and wildlife management. In FY07 there were 63 activities that involved 310,306 people, which included public information surveys, focus groups and public meetings.

#### Improving information management

Integrated Data Framework is an effort to consolidate and integrate, into a single electronic place, existing and new sources of information that will be used to make more informed management and policy decisions. During the year, we hired a contractor to help examine what information systems existed, what information was stored in those systems, what information employees required to effectively do their jobs, how best to integrate the information and to perform an analysis to map out where we want to go.

#### Tracked strategic plan accomplishments

This was the first fiscal year of tracking accomplishments of The Next Generation of Conservation, MDC's strategic plan approved by the Conservation Commission in April 2006. The plan identifies nine goals, 28 results we want to achieve and 61 specific actions that MDC will work with Missourians to achieve. An automated, web-based data entry program has been developed to facilitate accomplishment tracking.

# What the Money Bought—Fiscal Year 2007

County Assistance Payments—\$1,396,404 Included payments to Missouri's counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes and county aid road trust payments. Since 1980, more than \$12.42 million has been paid to Missouri counties in lieu of taxes.

Capital Improvements—\$22,855,287 Work included fish hatchery improvements, development of nature centers, river accesses, wetlands, shooting ranges, land acquisition transactions and renovation and repair of facilities statewide.

Fisheries—\$11,908,332 Managed 924 lakes and 40 stream management areas for public fishing. More than 833,543 people bought fishing permits, making fishing one of the most popular outdoor activities in Missouri. Fish hatcheries stocked 9.6 million fish in public lakes and streams.

Forestry—\$15,410,871 Fostered a healthy and growing forest resource. Examples include distributing 4.7 million seedlings for planting to nearly 12,000 landowners, developing 152 Landowner Forest Stewardship Plans, bringing an additional 38,336 acres under total resource management, managing 438,700 acres of public forest land, monitoring insect and disease threats and facilitating development of the state's forest industry.

Wildlife—\$16,074,091 Worked toward ensuring wildlife populations are in harmony with habitat and human enjoyment. Managed 526,198 acres of public land and implemented programs to maintain and restore natural communities and wildlife diversity across Missouri's landscape.

Outreach and Education—\$15,383,196 Sustained and nourished Missourians' connection to the outdoors by providing educational materials, schoolteacher contacts, outdoor skills programs, the Missouri Conservationist magazine, web-based information, books, videos, hunter education, staffed shooting ranges and conservation nature centers.

Private Land Services—\$8,775,673 Helped private landowners to achieve long-term conservation of natural resources and their land-use objectives. Delivered nearly \$1.1 million in cost-share funds to 607 private landowners; provided on-site technical assistance to 9,665 private landowners; improved habitat for quail and grassland songbirds on more than 13,000 acres of private land; helped landowners enroll almost 5,800 acres into the Wetland Reserve Program; and assisted 4,634 private landowners in controlling nuisance wildlife.

Protection—\$14,181,263 Paid for law enforcement in every county as well as resource management, information, education and public service contact activities conducted by 167 conservation agents who directly contacted more than 735,000 people. Coordinated the Share the Harvest Program where more than 6,580 deer hunters donated more than 322,000 pounds of venison to less fortunate Missourians. Conservation agents, along with 2,200 volunteer instructors, conducted 1,066 hunter education classes, certifying 25,000 students.

Resource Science—\$12,075,236 Provided the science-based information needed to effectively manage Missouri's natural resources. Resource Science monitors the status of Missouri's fish, forests and wildlife, recommends conservation actions, evaluates these actions and reports the results. In addition to surveys of fish and wildlife, more than 200,000 Missourians were contacted to determine their outdoor activities and opinions about conservation programs.

Regional Public Contact Offices—\$3,296,676 Provided regional public contact offices.

Administrative Services and Human Resources—\$28,646,718 Paid for human resources, federal reimbursement administration, hunting and fishing permit point-of-sale system, fiscal services, distribution center, print shop, fleet management, vehicle and equipment maintenance centers and information management and technology. Also includes other agency appropriations, Department-wide equipment and other essential services.

Design and Development—\$12,188,760 Provided engineering, architectural, surveying and construction services for conservation programs and maintenance of conservation areas and facilities.

Administration—\$2,550,447 Paid for audits, legal counsel and the coordination of strategic planning, environmental policy development, cultural resource reviews, public involvement and river basin management.

#### **RECEIPTS**

Conservation Sales Tax	\$103,332,575
Permit Sales	\$30,953,155
Federal Reimbursements	\$23,210,639
Sales and Rentals	\$8,947,515
Other Sources	\$3,965,239
Interest	\$1,267,398
Total Receipts	\$171.676.521

#### **DISBURSEMENTS**

County Assistance Payments0.85%
Capital Improvements13.86%
Fisheries
Forestry
Wildlife9.76%
Outreach and Education9.34%
Private Land Services5.33%
Protection
Resource Science
Regional Public Contact Offices
Administrative Services & Human Resources 17.39%
Design and Development
Administration

#### **MISSOURI STATE BUDGET**

Health & Social Services	35.8%
Education	28.4%
Government Services	21.2%
Transportation	11.2%
Natural & Economic Resources	2.7%
Conservation	0.7%
MDC represents less than 1% of the	total state budget
Total State Budget	\$21,239,817,527

# Missouri State Constitutional Language

Section 40(a). Conservation commission, members, qualifications, terms, how appointed-duties of commission-expenses of members.—The control, management, restoration, conservation and regulation of the bird, fish, game, forestry and all wildlife resources of the state, including hatcheries, sanctuaries, refuges, reservations and all other property owned, acquired or used for such purposes and the acquisition and establishment thereof, and the administration of all laws pertaining thereto, shall be vested in a conservation commission consisting of four members appointed by the governor, by and with the advice of and consent of the senate, not more than two of whom shall be of the same political party. The members shall have knowledge of and interest in wildlife conservation. The members shall hold office for terms of six years beginning on the first day of July of consecutive odd years. Two of the terms shall be concurrent; one shall begin two years before and one two years after the concurrent terms. If the governor fails to fill a vacancy within thirty days, the remaining members shall fill the vacancy for the unexpired term. The members shall receive no salary or other compensation for their services as members, but shall receive their necessary traveling and other expenses incurred while actually engaged in the discharge of their official duties.

Source: Const. of 1875, Art. XIV, Sec. 16 (as adopted November 3, 1936). (Amended August 8, 1972)

**Section 40(b). Incumbent members.**—The members of the present conservation commission shall serve out the terms for which they were appointed, with all their powers and duties.

**Section 41. Acquisition of property-eminent domain.**—The commission may acquire by purchase, gift, eminent domain, or otherwise, all property necessary, useful or convenient for its purposes, and shall exercise the right of eminent domain as provided by law for the highway commission.

Source: Const. of 1875, Art. XIV, Sec. 16.

**Section 42. Director of conservation and personnel of commission.**—The commission shall appoint a director of conservation who, with its approval, shall appoint the assistants and other employees deemed necessary by the commission. The commission shall fix the qualifications and salaries of the director and all appointees and employees, and none of its members shall be an appointee or employee. Source: Const. of 1875, Art. XIV, Sec. 16.

Section 43(a). Sales tax, use for conservation purposes.—For the purpose of providing additional moneys to be expended and used by the conservation commission, department of conservation, for the control, management, restoration, conservation and regulation of the bird, fish, game, forestry and wild-life resources of the state, including the purchase or other acquisition of property for said purposes, and for the administration of the laws pertaining thereto, an additional sales tax of one-eighth of one percent is hereby levied and imposed upon all sellers for the privilege of selling tangible personal property or rendering taxable services at retail in this state upon the sales and services which now are or hereafter are listed and set forth in, and, except as to the amount of tax, subject to the provisions of and to be collected as provided in the "Sales Tax Law" and subject to the rules and regulations promulgated in connection therewith; and an additional use tax of one-eighth of one percent is levied and imposed for the privilege of storing, using or consuming within this state any article of tangible personal property as set forth and provided in the "Compensating Use Tax Law" and, except as to the amount of the tax, subject to the provisions of and to be collected as provided in the "Compensating Use Tax Law" and subject to the rules and regulations promulgated in connection therewith.

(Adopted November 2, 1976)

Section 43(b). Use of revenue and funds of conservation commission.—The moneys arising from the additional sales and use taxes provided for in section 43(a) hereof and all fees, moneys or funds arising from the operation and transactions of the conservation commission, department of conservation, and from the application and the administration of the laws and regulations pertaining to the bird, fish, game, forestry and wildlife resources of the state and from the sale of property used for said purposes, shall be expended and used by the conservation commission, department of conservation, for the control, management, restoration, conservation and regulation of bird, fish, game, forestry and wildlife resources of the state, including the purchase or other acquisition of property for said purposes, and for the administration of the laws pertaining thereto, and for no other purpose. The moneys and funds of the

conservation commission arising from the additional sales and use taxes provided for in S 43(a) hereof shall also be used by the conservation commission, department of conservation, to make payments to counties for the unimproved value of land for distribution to the appropriate political subdivisions as payment in lieu of real property taxes for privately owned land acquired by the commission after July 1, 1977, and for land classified as forest cropland in the forest cropland program administered by the department of conservation in such amounts as may be determined by the conservation commission, but in no event shall amount determined be less than the property tax being paid at the time of purchase of acquired lands.

Source: Const. of 1875, Art. XIV, Sec. 16. (Amended November 2, 1976) (Amended November 4, 1980)

Section 43(c). Effective date-self-enforceability. — The effective date of this amendment shall be July 1, 1977. All laws inconsistent with this amendment shall no longer remain in full force and effect after July 1, 1977. All of the provisions of sections 43(a)-(c) shall be self-enforcing except that the general assembly shall adjust brackets for the collection of the sales and use taxes. (Adopted November 2, 1976)

Section 44. Self-enforceability-enabling clause-repealing clause. – Sections 40–43, inclusive, of this article shall be self-enforcing, and laws not inconsistent therewith may be enacted in aid thereof. All existing laws inconsistent with this article shall no longer remain in force or effect. Source: Const. of 1875, Art. XIV, Sec. 16

Section 45. Rules and regulations-filing-review. — The rules and regulations of the commission not relating to its organization and internal management shall become effective not less than ten days after being filed with the secretary of state as provided in section 16 of this article, and such final rules and regulations affecting private rights as are judicial or quasi-judicial in nature shall be subject to the judicial review provided in section 22 of article V.

Section 46. Distribution of rules and regulations. — The commission shall supply to all persons on request, printed copies of its rules and regulations not relating to organization or internal management.

# The Conservation Commission and Director

n 1936, the people of Missouri, through the initiative petition process, placed on the ballot and passed language that would create a non-political Conservation Commission with broad authority. The Conservation Commission is vested by the state constitution with responsibility for proper management of the state's fish, forest, and wildlife resources. The four Conservation Commissioners are appointed by the Governor. Their term of office is six years. The Commission is also responsible for hiring the Director.



Mr. Stephen Bradford Cape Girardeau Term: 7/27/2001 to 6/30/2007 Party Affiliation: Democrat



Mr. William F. McGeehan Marshfield Term: 7/11/2005 to 6/30/2011 Party Affiliation: Republican



Ms. Cynthia Metcalfe Saint Louis Term: 7/27/2001 to 6/30/2007 Party Affiliation: Democrat



Mr. Lowell Mohler Jefferson City Term: 7/09/2003 to 6/30/2009 Party Affiliation: Republican

# Director



Mr. John Hoskins

# **Our Mission**

To protect and manage the fish, forest, and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy, and learn about fish, forest, and wildlife resources.

# **Conservation at a Glance**

- ▲ We Listen to Missourians
- ▲ What Missourians Say About Conservation
- ▲ The Economics of Conservation in Missouri
- ▲ Wildlife Recreation
- ▲ Hunting and Fishing
- ▲ Forestry and Wood Products



# We Listen to **Missourians**

The Missouri Department of Conservation believes that all Missouri citizens are important and we want to listen and act to earn their trust. Our job is to listen, understand, and personally deliver programs and services in a manner that benefits all Missourians and the fish, forest, and wildlife resources in Missouri.



# To accomplish our mission we must listen to Missourians. We do this in a variety of ways.

- The Conservation Commission meets regularly and anyone may contact the Conservation Commission with comments or request to appear at a Commission meeting.
- The Director of the Conservation Department may be personally contacted at Department headquarters in Jefferson City, by telephone, or electronic mail.
- The Department Ombudsman works with citizens to resolve conflicts and answers a wide variety of questions by mail, telephone, and electronic mail.
- The Department conducts a wide variety of statistically accountable mail surveys, telephone surveys, and focus groups to determine the opinions and attitudes of Missourians about conservation and the Department of Conservation. The Department has conducted attitude, opinion, satisfaction, and participation surveys for over 25 years.
- The Department has eight regional service centers with staff available to assist Missourians with their conservation requests and needs.
- The Department's monthly magazine, free to Missourians that request it, includes a letter to the editor section and an "Ask the Ombudsman" column.
- The Department maintains an extensive internet web page with conservation information, how to contact the Department, and an online comment form.
- The Department conducts frequent public forums to obtain interactive feedback from all Missourians at locations throughout the state.
- Department regulations are formed and discussed in a public setting that invites citizen participation.

# What **Missourians** Say About **Conservation**

The majority of Missourians feel the Department of Conservation is doing an excellent or good job of providing services to themselves (64%), their families (63%), the community (61%), and the state (67%). Most Missourians say they are either very familiar (21%) or somewhat familiar (65%) with the Missouri Department of Conservation.

Information from the Missouri Department of Conservation and the 2003 Conservation Opinion Survey, University of Missouri.



- Most Missourians are either very interested (56%) or somewhat interested (37%) in Missouri's fish, forests and wildlife.
- Most Missourians (73%) agree that land should be acquired for fish, forest, and wildlife conservation.
- Most Missourians (79%) agree that the Department of Conservation should make an effort to restore animals that once lived or are currently very rare in the state.
- Most Missourians (82%) agree that the Department of Conservation should help private landowners who want to restore native communities of plants and animals.
- Almost all Missourians (88%) approve of hunting for food.
- About one-half of Missourians (51%) approve of cutting down trees to make lumber, furniture, or other wood products.
- The majority of Missourians (55%) agree that trapping is OK as long as it is regulated.
- Missourians are outdoor-oriented, with households having one or more participants that enjoy watching television or outdoor programs (82%), read about nature and wildlife (76%), feed birds and wildlife at home (64%), garden (66%), use Conservation Areas (62%), fish (58%), go boating (40%), hunt (34%), target shoot (37%), or volunteer in environmental or conservation groups (15%).
- Time is mentioned as the biggest obstacle to the enjoyment of outdoor activities by Missourians.
- Missourians are a uniquely outdoor-oriented citizenry, with a majority preferring outdoor recreational activities (56%) over reading or watching TV (34%), or structured sports (9%).



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# The **Economics of** Conservation in Missouri

The amount of state sales tax revenue generated from fish, forest, and wildlife recreation spending is about the same amount of sales tax revenue received by the Department of Conservation from the one-eighth of one percent Conservation Sales Tax-

Conservation pays its way in Missouri.

Information from the Missouri Department of Conservation, the Missouri Forest Products Association, and the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation—Conducted by the United States Bureau of Census for the United States Fish and Wildlife Service.

- The Department of Conservation paid over 1.3 million dollars (\$1,396,404) in fiscal year 2007 to Missouri counties for forest cropland payments, levee and drainage district payments, in-lieu-ofproperty-tax payments, and county aid road trust payments.
- The forestry and wood products industry in Missouri is an over 4.4 billion dollar activity and supports 32,250 jobs.
- Missourians and non-residents spend over one and one-half billion dollars (\$1,658,041,238.00) annually related to fish, forest, and wildlife recreation. These expenditures generate 3.3 billion dollars annually of business revenue in Missouri.
- The annual expenditures related to fish, forest, and wildlife recreation support 29,727 jobs in Missouri.
- Fish, forest, and wildlife recreation spending generates annually 79 million dollars of state sales tax revenue.
- In Missouri, 2.5 million residents and nonresidents, aged 16 years and older, participated in fishing, hunting, or wildlife-associated recreation.
- Resident anglers spend over 11 million days afield (11,308,772), resident hunters over six million (6,224,714), and resident wildlifewatchers nearly 11 million (10,937,486) in Missouri. Nonresident anglers add almost two million days (1,970,055), nonresident hunters one-third of a million (380,887), and nonresident wildlifewatchers over one and one-half million (1,510,458).
- Deer hunters in Missouri, age 16 years and older (372,726), spend over three and three-quarter million days afield (3,783,251) and spend, on average, \$16.27 each day. Resident deer hunters spend \$10.60 per day for an annual total of \$613.74 per person, which results in an overall total of over two hundred million (\$200,377,454.00) annually. Non-resident deer hunters spend \$139.22 per day for an annual total of \$600.77 per person, which results in an overall total of over 27 million (\$27,779,087.00).
- Deer hunting in Missouri generates 445 million dollars of business activity annually. This results in nearly 9 million in state sales tax revenue and almost four million of state income tax revenue.
- Deer hunting expenditures annually support over 4,162 jobs in Missouri.

# hunting and fishing

Hunters 489,000

Anglers 1,215,000

\$1.209 billion **Total Expenditures** 

Total Jobs Supported 21,877

\$531 million **Earnings from Expenditures** 

State Sales Tax Revenue \$57 million Sales and Income Tax Revenue \$77 million

Total Business-

Generated Revenue \$2.415 billion



Hunters and anglers in Missouri annually generate \$77 million in state sales and income taxes.

Hunters and anglers support more than 21,877 jobs each year.

# **TAKE A CLOSER LOOK**

- More Missourians hunt or fish than the number who attend St. Louis Rams or Kansas City Chiefs games.
- One of every four Missouri residents hunts or fishes.
- Annual spending by hunters and anglers is more than the cash receipts for cattle production, the state's most valuable agricultural commodity.
- The amount of sales tax revenue generated by fish, forest, and wildlife recreation is about the same amount of sales tax received by the Department of Conservation from the oneeighth cent sales tax—in other words, conservation pays its way in Missouri.

Information from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.







# wildlife recreation

Wildlife-Watchers 1,826,000

Total Expenditures \$449 million

Total Jobs Supported 7,850

Earnings from Expenditures \$200.1 million

State Tax Revenue \$22.1 million

Sales & Income Tax Revenue \$30 million

Total Business-

Generated Revenue \$937.8 million

# STATE TAX REVENUE INFORMATION

Wildlife-watchers in Missouri annually pay more than \$30 million in state sales and income taxes.

# **JOBS**

Wildlife-watching activities in Missouri support more than 7,850 jobs each year.

# **TAKE A CLOSER LOOK**

- In Missouri, adults involved in wildlife-associated recreation would fill Arrowhead Stadium in Kansas City more than 23 times.
- Missourians are outdoor-oriented—8 of 10 feed birds and wildlife at their homes and 6 of 10 use Department of Conservation areas.
- The amount of sales tax revenue generated by fish, forest, and wildlife recreation is about the same amount of sales tax received by the Department of Conservation from the one-eighth cent sales tax—in other words, conservation pays its way in Missouri.

# CONSERVATION PAYS ITS WAY IN MISSOURI



Information from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.







# forestry and wood products

**Total Forested Acres** 14 million **Privately Owned Acres** 85 percent **Publicly Owned Acres** 15 percent Wood-Using Industry Dollars \$4.43 billion Total Jobs Supported 32,250

Wood-Using Industry

Labor Income \$1.1 billion



# STATE TAX REVENUE INFORMATION

Forestry and the wood-using industries in Missouri generate \$54 million each year in state sales tax.

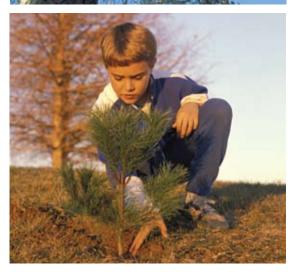
# JOBS

Wood industry firms and activities in Missouri support more than 32,250 jobs each year.

# **TAKE A CLOSER LOOK**

- Each year about 1.4 billion tree seedlings are planted.
- More than 1 million acres of forests have been added to Missouri's landscape in the last 30 years.
- Forests in Missouri are increasing faster than they are being harvested.
- Most of the forests in Missouri are privately owned.
- Forests are important to Missourians who enjoy outdoor recreation such as camping, sightseeing, watching birds, canoeing, photographing nature, hunting or fishing. Many Department of Conservation areas have campsites or are open for primitive camping.
- Forests in Missouri are essential for healthy streams, clean water, wildlife habitat and environmental stability.





# **CONSERVATION PAYS ITS WAY IN** MISSOURI

Information from the Missouri Department of Conservation and the Missouri Forest Products Association.



# **Our Pledge to Serve Missourians**

he Missouri Department of Conservation's mission, vision and goals communicate our never-ending pledge to serve Missourians and to meet the requirements of the Missouri Constitution (Article IV, Section 40(a) through 46).

## **Our Mission**

To protect and manage the fish, forest and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy and learn about fish, forest and wildlife resources.

# **Our Vision**

- ▲ To have healthy, sustainable plant and animal communities throughout the state of Missouri for future generations to use and enjoy, and to have fish, forest and wildlife resources in appreciably better condition tomorrow than they are today.
- ▲ To have all Missourians understand the relationship and value of plant and animal communities to our social and economic well-being.
- ▲ To have citizens and government agencies work together to protect, sustain, enhance, restore or create sustainable plant and animal communities of local, state and national significance.

# **Our Goals**

A new strategic plan, The Next Generation of Conservation, leads the Conservation Department's staff and resources into the future with nine goals. Like the strategic plans that preceded it, The Next Generation outlines how the Conservation Department will fulfill its constitutional mandate to serve Missourians by protecting the state's fish, forest and wildlife resources.

The new strategic plan gives our generation of conservationists a path to success. Through partnerships, sound scientific data, respect for public opinion and a dedication to public service, we can fulfill our obligation to protect and manage our natural resources for the benefit of future generations.

#### The Next Generation Goals

- ▲ Conserving Plants, Animals and Their Habitats
- Protecting Clean and Healthy Waters
- ▲ Promoting Healthy Trees and Forests
- ▲ Preserving Missouri's Outdoor Recreation Heritage
- ▲ Teaching Missourians About Fish, Forest and Wildlife Resources
- ▲ Supporting Conservation in Our Communities
- ▲ Helping Private Landowners Advance Conservation
- ▲ Serving Nature and You on Conservation Areas
- ▲ Accounting for Department Operations

# **Bringing the Goals to Life**

# Conserving Plants, **Animals and Their Habitats**

# Fish passage improvements made

Working closely with a variety of partners which include the U.S. Fish and Wildlife Service, the Missouri Conservation Heritage Foundation and county commissions in Dallas, Hickory and Miller counties, MDC has led efforts to replace low-water crossings with clear-span bridge structures at selected locations in south-central Missouri. These efforts are consistent with our Comprehensive Wildlife Conservation Strategy and were designed to improve fish passage for the Niangua darter, a federally and state-listed species of conservation concern, and other native aquatic species.

Monitoring of these projects by MDC staff demonstrates that barriers to fish passage have been effectively removed, sediment transport and channel stability have been enhanced, and additional habitat has been made available for colonization by Niangua darters, as well as sport fish such as smallmouth bass. At the same time, these projects benefit the county partners and their residents through enhanced bridge stability and safety and reductions in the time and expense invested by county crews in debris removal and bridge repairs following high-water events.

#### **Enforced resource protection laws**

MDC enforces wildlife laws to maintain compliance with the Wildlife Code, as well as other state laws for the safe public use of MDC-owned lands. Conservation agents contacted 221,000 hunters and anglers in FY07 to ensure compliance and provide regulation information. During these contacts, agents noted 31,100 resource violations, issued 4,500 written warnings and made 8,900 arrests. This resulted in a 95 percent conviction rate, which indicates the high-quality work by agents in the area of resource law enforcement.

# Quail and grassland-bird habitat managed, monitored and evaluated

MDC continues to find solutions to declining populations of northern bobwhite quail, greater prairie chickens and other grassland birds. The status of quail/grassland-bird populations and efforts to reduce their decline remain top MDC priorities. We have restored quail and grassland-bird habitats on MDC lands, implemented regional quail/grassland-bird plans in appropriate bird emphasis areas, and identified prospective landowner cooperatives on private lands surrounding select MDC lands within quail focus areas.

We also have monitored quail and bird populations to aid the management evaluation process. MDC leads the recovery efforts to reverse the continued decline of the state-endangered greater prairie chicken. Through a variety of media channels, we have informed citizens of the dramatic land-use and habitat changes which have impacted the quality and quantity of quail, prairie chicken and other grassland-bird species in Missouri. We have formed partnerships with the Missouri Prairie Foundation, Audubon Society of Missouri, Audubon Missouri, Conservation Federation of Missouri, Grasslands Coalition, Quail Unlimited, Quail Forever, National Wild Turkey Federation, The Nature Conservancy, Osage Plains Prairie Seed Cooperative, Partners in Flight, state and federal agencies, local municipalities and other conservation organizations to restore grassland/ prairie habitats.

# Greater prairie chicken recovery plan aided by collaborative efforts

Implementation of the prairie chicken plan was a high priority in grassland focus areas. Partners continue to be an invaluable asset as the efforts to increase prairie chickens and other grassland birds attracted numerous grants and incentives targeted to landowners within the focus areas. The number of partners within the Grassland Coalition continue to grow, as well. Grassland and prairie chicken conservation priorities attracted \$2.5 million to Grasslands Coalition Focus Areas (GCFAs). This included 14 grants from federal, state and private sources, the Wildlife Diversity Fund, USDA programs and a Landowner Incentive Program grant. Grasslands Coalition partners purchased 492 acres and protected 400 additional acres through

easements or land exchanges. Existing long-term agreements protect 1,740 acres, and new USDA contracts will improve and protect 1,800 additional

Management intensity on MDC lands and private land increased in the focus areas, and almost 16,000 acres were manipulated. Audubon Missouri, the city of Cole Camp and MDC joined forces to hire a term employee to lead communitybased conservation efforts in the Hi Lonesome GCFA. The Conservation Federation of Missouri, Missouri NRCS, the Southwest and Osage Valley Resource Conservation and Development councils, the Audubon Society of Missouri, the Missouri Bird Conservation Initiative, the Sac-Osage Rural Electric Cooperative and Agriculture Program economists all have joined the efforts to restore grasslands for prairie chicken and grassland wildlife. The focus is to explore options for making grassland management wildlife friendly and feasible for private landowners.

# Wildlife Damage Program continued active role

The Wildlife Damage Program maintains relationships and partnerships with agencies and organizations concerned with wildlife damage issues. These include the Missouri Trappers Association, USDA/APHIS-Wildlife Services, Missouri Department of Agriculture, Missouri Department of Natural Resources and the U.S. Forest Service.

Internally the program continues to assist Outreach and Education with the Cable Restraint Program, Resource Science with otter research and other special projects. It also represents the division on internal committees such as the Nuisance Urban Goose Implementation Team, River Otter Task Force, Feral Hog Task Force and Mountain Lion Response Team.

**Feral hog eradication program:** Increasing numbers of feral hogs in Missouri continue to be a concern for MDC, and methods of controlling their numbers have met with limited success. Their destructive behavior, potential for disease transmission and direct competition with native wildlife for food and cover spurred MDC to implement a more aggressive approach to eliminate them.

We began a plan in FY07 that includes aerial shooting, day- and night-shooting over bait, trapping and shooting, eradication with trained dogs, and the use of radio-collared "Judas hogs" to locate and kill other hogs. We focused our attention on MDC areas and the land adjoining them.

MDC initiated an effort to start building hog traps and to purchase other equipment to facilitate the removal of feral hogs. We contracted with a USDA-Wildlife Services helicopter crew to demonstrate an aerial gunning operation for hog removal on one of our wildlife areas. In addition, we secured a contract with a professional dog handler to locate and kill feral hogs. The handler led a successful eradication in May. In addition, we used wildlife diversity funds to support an eradication effort in the Tumbling Creek Cave recharge area in Taney County. Traps also are being set to capture and eliminate feral hogs on MDC properties.

We made initial efforts to organize a state-level task force—pending an executive order by Gov. Blunt—to further address the feral hog issue in Missouri.

# Natural communities benefited from programs and management

We are emphasizing the restoration and management of productive natural communities that benefit the full range of MDC programs and Missouri landscapes. Our programs and actions promoted the establishment of native-plant communities which enhance wildlife diversity and ecosystem restoration. We actively managed habitat on 21,752 acres of grassland/prairie, 41,259 acres of marsh/ wetlands, 580 acres of glades, 45,000 acres of forest, 9,250 acres of savannas and 15,977 acres of old field. We also enhanced or created 158 miles of edge and planted more than 192,000 trees on MDC areas. Crop land management (66,879 acres) for certain wildlife species and timber harvest—to achieve desired vegetative conditions, restore natural communities and/or demonstrate appropriate stewardship activities—were important area management activities. Through the Missouri Natural Areas program, 89 natural areas (32,607 acres) on MDC lands have been designated as models for natural community restoration. MDC manages an additional 22 natural areas (2,697 acres).

# Three natural areas approved

The Missouri Natural Areas Committee reviewed and approved the addition of three natural areas to the statewide system. Two new additions and one expansion accounted for an additional 1,557 acres added this past fiscal year.

1) Alley Spring Natural Area, a 795-acre natural area in Shannon County, comprises 340 acres owned and managed by the Ozark National Scenic Riverways (National Park Service) and 455 acres of the Angeline Conservation Area owned and managed by MDC. This natural area contains Alley Spring Spring Branch, biologically significant caves, dolomite glades, dry dolomite woodlands, dry and dry-mesic chert woodlands and five species of conservation concern. The area contains one of the most biologically diverse caves in the state. There is also a large remnant of old-growth shortleaf pine-white oak woodland on the area. This natural area will be jointly managed by the National Park Service and MDC.

- 2) Auxvasse Natural Area is a 110-acre natural area within the Reform Conservation Area in Callaway County. It contains the most biologically significant dolomite glade north of the Missouri River and in the Outer Ozark Border Ecological Subsection. It also contains high-quality dry dolomite woodlands.
- 3) Spring Creek Gap Glades Natural Area addition is a 652-acre addition to the original 40-acre natural area contained within Spring Creek Gap Conservation Area in Maries County. This addition adds substantial acreage of high-quality dolomite glades and dry-chert woodlands to the original natural area. This natural area expansion will allow for conservation, restoration and management of a representative landscape of the Gasconade River Hills Ecological Subsection.

# Efforts converted right-of-way to native plants

Through a cooperative agreement with the Missouri Department of Transportation, MDC facilitated the conversion of 397 acres of highway rightof-way from introduced, cool-season grasses to a diverse mixture of native warm-season grasses, forbs and legumes.

# Lake sturgeon restoration

Lake sturgeon, first stocked in the Mississippi River in the 1980s, are just now becoming adults. Radio transmitters implanted in lake sturgeon have shown that adult fish make long migrations during high water. We also have studies under way to learn about the habitats used by small lake sturgeon and the movement of newly stocked fish. Monitoring has begun so we can develop an index of lake sturgeon abundance that can be used to measure population trends through time. We continue to stock lake sturgeon, and added 10,816

7-inch fish to six locations on the Missouri and Mississippi rivers in FY07. MDC also conducted "joint patrols" of the Missouri and Mississippi rivers to monitor commercial fishing activity and the harvest of shovelnose sturgeon.

# Grotto sculpin recovery

We continued recovery efforts in the Perry County karst region in FY07. We secured funding to hire a project coordinator and begin a four-year water quality, dye-tracing and educational project. Staff conducted dye traces to delineate the recharge area of the five major cave systems where grotto sculpins are found. We conducted surveys of grotto sculpin populations in four cave systems and collected DNA samples to determine their taxonomic status. Through work with the Cave Research Foundation, we developed ArcGIS layers of cave maps, cave entrances, springs and satellite imagery. We made presentations to landowners, spelunking and cave-research groups, and other agencies.

## Alligator gar restoration

Alligator gar, one of the largest aquatic animals in North America, have experienced population declines throughout much of their native range. In partnership with the U.S. Fish and Wildlife Service, MDC biologists have assisted in the reintroduction of alligator gar to portions of its former habitat in Missouri. In May 2007 we released 15inch alligator gar in the Monopoly Marsh of Mingo National Wildlife Refuge. This was the first of five annual releases planned for the area. Researchers from MDC and Southeast Missouri State University tracked the gar to determine movement and habitat preferences. MDC biologists will be studying the fish community of Monopoly Marsh to determine whether there are any changes as a result of restoring this native species. Alligator gar occasionally are seen in other Missouri waters, and large fish sometimes are caught—as evidenced by the state record 127-pound fish caught in May 2007.

#### **Cavefish conservation**

MDC made special efforts in FY07 to reach landowners living in recharge areas of Ozark cavefish caves. We conducted informational meetings and personal visits to increase awareness of issues affecting cavefish. Southwestern Missouri newspapers published articles on cavefish, which stimulated additional landowner contacts and interest.

Several cost-share projects are pending; these will help enhance and protect karst habitats which support populations of this unique species.

# Aquatic conservation opportunity area management

MDC staff has been actively involved in managing many of the 158 aquatic conservation-opportunity areas of Missouri. The stream community and aquatic-habitat work completed for the West Fork Big Creek in Harrison County is a good example of our efforts. The West Fork Big Creek lies within the larger Grand River Grasslands Conservation Opportunity Area, spans the Missouri and Iowa border, and is targeted for native grassland and prairie restoration. The federally listed Topeka shiner has been found in the watershed. Staffusing standard sampling protocols—collected baseline data on fish, crayfish, mussel communities, stream geomorphology and aquatic habitat at 11 random sites on private land.

These surveys provide a good "snapshot" of stream biota, habitat diversity and channel stability within a watershed with good potential to sustain a diverse aquatic community within a prairie ecosystem. We will share results with cooperating landowners and use them to encourage conservation practices on private lands. The practices, in turn, will reduce soil erosion and protect water quality.

In FY07 we also trained employees in standard sampling protocols, formed special regional sampling crews and reassigned vacant positions and staff time. All these actions enhance MDC's capacity to manage aquatic conservation opportunity areas elsewhere in Missouri.

## Measuring usage of timber

In spring 2007 we conducted the Timber Product Output survey. MDC foresters visited 416 primary producers to determine the usage of timber from Missouri's forests. They visited every sawmill, post mill, chip mill, pole mill and charcoal plant in Missouri that produced forest products in 2006. Information received from this survey will be used for many purposes. Determining the sustainability of Missouri's forest, calculating the economic impact of Missouri's forest products industry, and determining the feasibility of wood-based alternative energy facilities are just a few of the potential applications of the information obtained from this survey.

# Shallow sand island habitats important to small and young fish

Channelization of the Missouri River during the past 70 years has reduced shallow sand-island habitat by more than 90 percent. This habitat is thought to be important as nursery areas for many species, as well as important to many adult smallbodied fishes. MDC funded a study through the University of Missouri to evaluate seasonal fish use of shallow sand-island habitat and to determine which species and life stages use these areas.

Researchers found that juveniles of native bigriver fishes used shallow-water habitats more than deep-water habitats in the main channel of the river; juveniles generally selected habitats less than 4 inches in depth, with currents less than 2 inches per second. Many species showed a dramatic increase in use of the shallow, slow-flowing habitats during the night. This research illustrated the importance of this habitat type and the need to increase its availability in the Missouri River.

# Genetics program enhances conservation of rare and common species alike

The Statewide Conservation Genetics Program uses the principle that there is genetic diversity throughout Missouri's animal and plant species that determines their productivity and survival. By identifying this diversity, often through analysis of DNA, rare animal and plant species can be protected, sport fishing can be improved, hatchery strains can be selected and species can be restored. DNA "typing" often can be used to identify species, sources and sometimes "parents" of animals and plants in the wild. Species studies involve walleye, several darters and crayfish, black bass, shortleaf pine and hellbenders.

# Long-term resource monitoring program on Mississippi River

This program is a cooperative effort among the U.S. Army Corps of Engineers, U.S. Geological Survey, and states in the upper Mississippi River basin, including Missouri. Long-term trends in fisheries, water quality, invertebrates, forest resources, land use and land cover for the entire upper river system are monitored through a network of state-operated field stations.

Missouri's contribution is the Big Rivers and Wetlands Systems Field Station, which began operation in 1991 and monitors conditions in the 25 river miles both north and south of Cape Girardeau. Water-quality data are collected year 'round and fisheries data are collected from June through October each year. This information is used by several agencies in and outside Missouri. The program also is involved in answering specific research or management questions that come to light from analysis of the monitoring data, and these questions involve issues ranging from small invertebrates to birds.

# Largemouth bass recruitment in White River lakes

Largemouth bass recruitment is a complex process affected by multiple lake-related factors. Recruitment in fisheries is normally defined as both successful reproduction and survival to a certain size or age of fish—normally one year of age.

By sinking brush in shallow water of Bull Shoals Lake, MDC began a study that attempts to mimic the beneficial environment created for small fish during high-water conditions. After brush placement, we monitored largemouth bass nests in the spring and juvenile largemouth bass in the summer and fall to determine if brush is beneficial to young largemouth bass. We also monitored large predatory fish within these brush areas to determine their effect on recruitment of young largemouth bass. Information from this study may increase survival of young black bass in White River reservoirs during periods of normal or below-normal water levels. This will result, ultimately, in improved fishing.

# Missouri's crayfish bait industry helps to protect aquatic resources

The introduction of alien invasive crayfish is a serious problem in freshwater ecosystems in North America and Europe. Consequences include loss of native crayfish, amphibian and reptile populations, habitat changes, disruption of food chains and collapse of prized fisheries. The live-bait trade is a primary source for the introduction of these alien crayfishes.

In response, some states have banned the use of live crayfish as bait. Missouri's policy allows legal sales of four native crayfish species and prohibits crayfish taken from the wild to be sold as bait. In 2002, all known bait vendors in Missouri (370 shops) were telephoned to determine if they sold crayfish. In 2003 and 2004, conservation agents visited 105 bait shops throughout Missouri and collected crayfish for identification. The majority of bait shops surveyed were conducting legal sales,

but three illegal species were found, including the alien rusty crayfish. In addition, two legal species—the White River crayfish and the red swamp crayfish—were prevalent in samples and were sold at multiple locations throughout the state where these species were never found.

Inspection of bait-shop owners' sales records revealed that crayfish were supplied by commercial sources in Missouri and six other states, and that they also were obtained illegally from the wild. Subsequent management efforts have focused on removing illegal species from bait shops and educating bait vendors about bait regulations and invasive species. We are preparing a crayfish identification guide for bait-shop owners at their request. We also are considering additional changes to policies regarding several invasive species.

# New wetlands at Columbia Bottom **Conservation Area**

Newly developed wetland pools received water for the first time during FY07. Development of nearly 800 acres of managed wetlands at Columbia Bottom Conservation Area has been a cooperative project between MDC and the Army Corps of Engineers. The project's final phase included installation of a pump station to provide a permanent source of water for wetland pools. The seven managed wetland pools all have independent drainand fill-capability through an elaborate system of pipelines, valves and water control structures. Wildlife of various kinds responded to fall flooding by using the new wetland pools.

A limited amount of waterfowl hunting was allowed on the area in fall 2006. The pump station cost the Corps of Engineers approximately \$5 million, and the total project cost throughout several years is approximately \$9 million. Wetland work at Columbia Bottom Conservation Area is part of the Corps of Engineers' Missouri River Fish and Wildlife Mitigation Program.

### Southeast Missouri turkey release

In an attempt to better establish wild turkevs in southeastern Missouri, MDC trapped and released 140 turkeys on seven public areas in FY07. Public lands receiving birds were Coon Island, Big Cane, Girvin, Otter Slough, Ten Mile Pond and Wolf Bayou Conservation areas, as well as Morris State Park. The National Wild Turkey Foundation (NWTF) was instrumental in trapping efforts and donated a large amount of time. MDC staff transferred the birds to their release sites, and volunteers from NWTF helped release the birds. Turkeys were trapped generally north of the Missouri River on public land that is not hunted or from private land in cooperation with willing landowners.

# Coordinated and implemented interstate and intrastate river-basin management

Staff represented the state's fish, forest and wildlife interests in various interstate working groups to implement ecosystem-based management necessary for the conservation and enhancement of natural and recreational resources of the Missouri, Mississippi and White rivers. They helped direct the implementation of \$82 million available through the Missouri River Fish and Wildlife Mitigation Project for habitat restoration, \$21.9 million available through the Mississippi River Environmental Management Program (EMP) for biological monitoring and habitat restoration, and \$11 million available for planning efforts within the proposed Mississippi River Navigation and Ecosystem Restoration Program (NESP). One EMP action included continued development on the Ted Shanks Conservation Area wetland-enhancement project.

White River basin coordination focused on reviewing the status of the White River Comprehensive Study. The study is an umbrella under which projects can be conducted and funded to the benefit of basin stakeholders. In recent years, there has been considerable turnover of key staff. New leadership from the U.S. Army Corps of Engineers focused on identifying the current state and federal agency contacts. In addition, they reviewed past partnership projects, with an emphasis on determining the current status of the cost-share match. Our fiscal obligations are current and we are poised to begin a new cooperative project in the coming year.

# Worked with industry, state and federal regulators to protect state's resources

Staff responded to outside requests for information regarding Missouri's species and communities of conservation concern. They also coordinated MDC's participation and response to federal and state environmental review processes from those seeking to comply with the National Environmental Policy Act, Clean Water Act and other federal and state laws, rules and regulations. Additionally, in order to comply with state and federal environmental laws and the National Historic Preservation Act, we obtained necessary permits and clearances for all MDC constructions and resource-restoration

Agency staff participated with the U.S. Army Corps of Engineers, Missouri Department of Natural Resources and other state and federal agencies in establishing regional conditions within the Section 404 Nationwide Permitting Program. The new regional conditions included the introduction of select aquatic Conservation Opportunity Areas (COAs) as "Priority Waters" and require Pre-Construction Notification (PCN) to the Corps for activities regulated by the Section 404 program. MDC also advanced other important conditions of the Nationwide program: aquatic organism passage, allowable streambank stabilization materials and zebra mussel prevention.

Agency staff participated in a Federal Energy Regulatory Commission Environmental Impact Statement (EIS) and Record of Decision (ROD) for the Rockies Express West Phase Project (Natural Gas Pipeline). This phase of the project comes into Missouri in Buchanan County to a point in Audrain County. The Rockies Express East Phase will connect at that point and leave Missouri at some point in Pike County, Missouri. This project is still in progress and staff continues to be involved with this portion of the project. We anticipate an impact to public lands near the Ted Shanks Conservation

Agency staff has been involved in the U.S. Department of State-led Environmental Impact Statement for the Canadian-based Keystone Project (Oil Pipeline). A final EIS or ROD has not been released on this project, which is collocated along the Rockies Express Pipeline from Buchanan County, Missouri, to a point in Audrain County. The Keystone project then will travel from there to a crossing across the Mississippi River in St. Charles County.

The pipeline companies have agreed to avoid or minimize, through a variety of constructions techniques and practices, their impact through the identified Conservation Opportunity Areas projected along the routes.

### Conserving all wildlife in Missouri

MDC is leading the implementation of the Missouri Comprehensive Wildlife Strategy (CWS), which is benefiting the broad conservation community in Missouri. MDC and sister conservation agencies are using the conservation opportunity areas (COAs) as places to invest more management and restoration dollars.

Of the original 33 COAs with profiles, 13 are considered very active, 12 have some level of activity and the remaining eight are not benefiting significantly from the CWS at this time. During the last year, three more stakeholder teams have been added (or are being added) to the directory: Blue River COA, Missouri River Hills COA and Southeast Sand Ridge Grasslands COA. Leadership at the level of COA coordination (significantly more than stakeholder team representation) includes: Missouri Department of Natural Resources, Mid-America Regional Council, U.S. Fish and Wildlife Service, Missouri Prairie Foundation, Audubon Missouri, Greenbelt Land Trust of Mid-Missouri, Missouri River Communities Network and MDC.

Partners at the state and local level are participating in stakeholder teams and benefiting because significant amounts of new money are being invested in the COAs. Grants and new money totaled at least \$5 million during January 2006-June 2007. The Nature Conservancy raised \$2 million for land protection in the Current River watershed. The Doris Duke Charitable Foundation gave Ducks Unlimited \$1 million for land protection in the Mingo COA and Missouri-Mississippi River Confluence COA. The Existing Conservation Network (ECN) is the land area in a COA where conservation for wildlife diversity is a high priority for the foreseeable future. During the last 18 months the ECN grew by an estimated 12,000 acres. Land acquisition totaled more than 3800 acres. Two conservation partners—Ozark Regional Land Trust and Ducks Unlimited-worked with private landowners to establish conservation easements on 2,200 acres. An estimated 6,000 acres were enrolled in the Wetland Reserve Program (WRP).

The most significant contribution to land protection was from WRP easements made possible by the Farm Bill. The strategy is meeting the goal of providing broad strategic conservation goals at the state level, and engaging the conservation community at the local level to ramp up conservation action in priority geographies.

# Invasive species update

The Missouri Department of Conservation has been working with our state, federal and nongovernmental organization partners to complete and implement invasive species work plans in Missouri. During FY07, the MDC invasive species coordinator completed the Missouri Aquatic Nuisance Species Management Plan and drafted the Missouri Emerald Ash Borer Action Plan and the Emerald Ash Borer "frequently asked questions."

We drafted the action plan for responding to an emerald ash-borer infestation. The emerald ash borer is an invasive species that has killed all ash trees in many cities to the east of Missouri. It has not been found in Missouri. If it becomes established in the state, it could generate significant tree-care and removal cost for cities and towns throughout Missouri.

Public outreach continues to be a critically important component of the Invasive Species Program. Invasive species was the theme for MDC at the 2007 Missouri State Fair. In coordination with our partners, we developed and distributed brochures and watch cards; conducted workshops, a direct-mailing campaign, trainings, interviews and focus groups; published articles; and provided information about invasive species to staff and the public. All these things were done in an effort to provide a clear and consistent message of prevention, early detection and rapid response, control and management, and outreach and education.

# Protecting Clean and Healthy Waters

#### Stream Team growth continues

The Missouri Stream Team program continued to grow, and its members completed many successful projects. There are more than 3,400 teams whose volunteers spent 183,041 hours working on their adopted streams. Since the program began in 1989, volunteers have spent more than a million hours protecting and improving Missouri streams.

# Hunnewell Lake water-quality project

MDC completed the second full year of waterquality sampling at Hunnewell Conservation Area in FY07. We conducted water-quality analysis from stormwater samples collected before application of effluent from a concentrated animal feeding operation in the watershed. This provided valuable baseline information. These data, coupled with the data from Hunnewell Lake, will be used to monitor the effects of effluent from animal feeding operations on the lake's water quality.

# LaBarque Creek efforts

In recognition of LaBarque Creek's unique status as a high-quality stream in the St. Louis metropolitan area, MDC biologists have pursued a variety of conservation efforts to protect and enhance its watershed. We formed the LaBarque Creek Conservation Area and expanded the Young Conservation Area to protect portions of the watershed and stream frontage along LaBarque Creek. These actions provided for additional outdoor opportunities in this rapidly urbanizing area. Through a variety of grants, biologists are pursuing conservation easements, species inventories, invasive species control and habitat restoration and enhancement. In addition, two watershed committees have formed, and a brochure about the watershed was produced and mailed to every landowner in the watershed.

#### Clean Vessel Act grant program

MDC staff oversaw the completion of three Clean Vessel Act Grant Program projects (two Lake of the Ozarks marinas and one Table Rock Lake marina). The purpose of the federal Clean Vessel Act of 1992 is to help reduce pollution from vessel sewage discharges by assisting with the installation of boat pumpout systems at marinas. This program, which is administered by the MDC in Missouri, provides federal reimbursement of up to 75 percent of the costs of approved projects, with the remaining funds provided by the marina owners.

# Streams are better understood

In FY07, MDC staff successfully helped a wide range of citizens better understand how rivers and streams function. We provided short courses to groups such as Native American tribes, county commissioners, Missouri Canoe Outfitters Association, Master Naturalist students and staff from the Missouri Department of Natural Resources, Environmental Protection Agency and the Corps of Engineers. In every case, MDC staff witnessed immediate positive results as attendees used the newly acquired knowledge to better manage our rivers and streams.

### Riparian conservation easement

We negotiated a perpetual conservation easement on approximately 25 acres of high-quality riparian forest along Long Branch Creek and two of its tributaries in Macon County. This easement protects both banks of 0.7 miles of stream frontage and bottomland forests from grazing or other encroachment upstream of Long Branch Reservoir. The reservoir is a popular recreation destination and is the water supply reservoir for much of Macon County.

# Effects of impoundments on headwater streams

For many years the impacts of small-flood control structures have been points of contention among natural resource agencies. Recognizing that scientific data were needed to address the concerns, MDC staff worked with other state and federal agencies to develop research on the topic. The study goal is to determine how shifts in flow regime due to headwater impoundments affect the physical habitat, hydrology and biology of intermittent and ephemeral streams. Information from this study may help guide the future design and permitting of impoundments, assist with state comprehensive wetland monitoring and could enhance future research on headwater streams.

Impoundments also may alter downstream fish communities in headwater streams through the loss of fish from impoundments during overflow periods. Department staff recently conducted an evaluation of fish escapement from an impoundment on Scrivner Road Conservation Area. The study documented the species, number and sizes of fish that traveled through a surface discharge spillway pipe during overflow periods. The results showed that the loss of fish with overflow water was a common occurrence, with most leaving during early stages of the discharge period.

#### Stream Stewardship Trust Fund

The Stream Stewardship Trust Fund is an in-lieu fee program created in 1999 to mitigate the loss of Missouri's stream resources. It is available to restore, enhance and/or protect stream systems and associated riparian habitats. From its inception in 1999 until the end of FY07, more than \$3.1 million had been collected through the program. The program and funds are administered by the Missouri Conservation Heritage Foundation, and MDC staff apply for grants to use toward protecting Missouri stream resources. In FY07, nine projects costing \$690,000 were approved to protect 70.1 acres of stream channel and 276 acres of riparian corridor. To date, \$2.1 million in funds have been allocated to 39 projects that offer protection to 681 acres of stream channel and 1,513 acres of riparian corridor.

# **Best Management Practices for forest management**

We implemented and maintained soil and water conservation Best Management Practices (BMPs) for all forest management practices on conservation areas. Ten percent of the forest sites selected receive a detailed critique to make sure BMPs are being properly implemented and are effective. In FY07 we reviewed 34 sites on 1,678 acres for proper BMP implementation and effectiveness. Spot checks were performed on the remainder of forest management practices.

# East Fork of the Black River restoration under way after Taum Sauk Dam collapse

MDC is working cooperatively with several agencies to restore forest, fish and wildlife resources affected by the collapse of the Upper Taum Sauk Dam. The collapse and catastrophic flooding that ensued caused substantial habitat damage in the East Fork of the Black River and Lower Taum Sauk Reservoir. We provided recommendations for aquatic restoration efforts to the Missouri Department of Natural Resources, the lead agency for implementing resource-damage reconstruction for the Taum Sauk Dam catastrophe.

Rehabilitation efforts focused on construction of a new stream channel through Johnson's Shut-Ins State Park, removal of clay and silt from Lower Taum Sauk Reservoir and the East Fork of the Black River, and flow releases from the lower reservoir. We also sampled habitat, fish, insects and other invertebrates to help evaluate effects on aquatic life and habitat. Even though progress is being made, we don't yet know the full effects of the reservoir failure, clean-up and stream-rehabilitation efforts.

# Agencies' cooperation increased effectiveness of contaminant monitoring

MDC initiated discussions with the Missouri departments of Natural Resources, and Health and Senior Services to explore ways to more efficiently collect key fish-contaminant information. Through cooperation on fish collection and sample analysis, we have increased the amount of information collected, with no increase in cost to the public. We also have shortened the time it takes to get this information to the public in the form of fish-consumption advisories. We also have been better able to define the impacts of lead mining and subsequent remediation activities on Missouri's forest,

fish and wildlife resources. This will ensure that, as the contaminated areas are cleaned up, public funds will be expended on the activities that will provide the most natural resource benefits.

Finally, as a result of a new strategic direction, we will perform a comprehensive summary of the fish contaminant data that MDC has collected during the past 25 years. We will use the information—in conjunction with emerging new contaminant issues—to update the program. The first summary was conducted this year on mercury data.

# Collaboration seeks to improve aquatic resources at Bagnell Dam

After the Federal Energy Regulatory Commission issued a new license for the Osage Project, MDC worked with the other parties to develop plans which will guide the implementation of natural resource-related articles of the license. In addition, MDC joined other resource agencies and AmerenUE in efforts to determine how to design, construct and install a fish barrier net in front of the turbines of Bagnell Dam. There also have been collaborative efforts regarding water-quality enhancement measures to be taken within the operation of Bagnell Dam. Water quality and habitat improvements will be provided for the 82 miles of the Osage River below Bagnell Dam. The Conservation Department and the Missouri Department of Natural Resources also have assisted AmerenUE in resolving issues related to the natural resources-protection conditions filed in their Shoreline Management plan.



## Guidelines help MDC manage forests

MDC is revising and refining the way it manages forests. The Forest Land Assessment Guides identify multiple processes for evaluating and managing the diverse woodland and forest communities in Missouri. They are tools that will help natural resource managers develop insights on how to evaluate, understand and sustainably manage Missouri's forest and woodland communities. The guides incorporate adaptive management concepts and provide direction so that environmental, economic and social benefits are derived from sustainable forest management. Together with

area plans, the guides provide a foundation for implementing the broad goals outlined in The Next Generation of Conservation.

# Learned lessons from the Missouri **Ozark Forest Ecosystem Project**

The Missouri Ozark Forest Ecosystem Project (MOFEP) is a landscape-scale, long-term experiment designed to study the impact of even-aged, uneven-aged and no-harvest management on flora and fauna in Missouri oak-hickory forests. Project components include determining the effects of forest management on bird, reptile and amphibian communities, small mammals, insects and vegeta-

MOFEP enables resource managers to use the knowledge gained through experimentation to adjust and improve their management systems during the course of the project. Results thus far suggest that harvesting did not adversely affect bird, amphibian, reptile or small mammal species, but it reduced insect herbivore diversity. Harvested sites had significantly higher overall species richness and ground flora cover, including soft mast, than no-harvest sites. Even-aged and uneven-aged management increased soft mast production. Harvesting decreased the amount of carbon stored. Uneven-aged management increased harvest damage. Armillaria species (root rot) are major contributors to Ozark forest decline. Economic benefits between even- and unevenaged management were similar. Our understanding of the effects of management prescriptions on ecosystem components and the value of the data derived from MOFEP will grow as we continue to monitor studies in the long-term.

Effects of even-aged forest management on early successional bird species: The effects of different clear-cut sizes on species richness, abundance and reproductive success of birds were evaluated on the MOFEP study sites. Species richness was higher in larger clear cuts than in smaller openings, and size had a significant effect on relative abundance of four focal species: yellow-breasted chat, indigo bunting, white-eyed vireo and prairie warbler. There was no observed relationship between clear-cut size and reproductive success, but this study confirmed our observation that the rate of brown-headed cowbird parasitism is low on the MOFEP sites. The results of this study suggest that it is beneficial to have a variety of sizes of openings when designing forest management plans.

# Oak mast production surveyed

Oak mast is a very important source of fall and winter food for many species of wildlife, particularly in the heavily forested portion of the state. Poor mast years have resulted in lowered reproductive success in and reduced numbers of wildlife. Additionally, mast production is essential for oak regeneration and influences hunter success.

The oak mast survey is conducted annually by forestry staff to provide an index for the availability of oak mast, giving the agency and the public an indication of what is in store for mast-dependent forest wildlife during fall and winter. Information on mast production is used by resource managers, the news media and the public—particularly hunters.

In 2007 we sampled 3,847 oak trees-2,047 from the red oak group and 1,800 from the white oak group. The composite oak mast index was poor, with decline of 49 percent from the 48-year average and 81 percent from last year's mast production. This year's mast production was the fourth lowest index recorded since 1960. Red oak index (145) was good and well above the red oak longterm average (138). In conclusion, mast production was poor this year, particularly in white oaks. Poor mast production in white oaks was attributed to the late-spring freeze.

## Sustainable Logger of the Year Award

We continued to promote sustainable forest harvesting by establishing the Sustainable Logger of the Year Award. The award is designed to recognize loggers who are demonstrating logging techniques and ethics that ensure sustainable forest resources. We recognized six loggers—one on each of six regions. The statewide winner received recognition at the Missouri Forest Products Association annual conference in July 2007.

# Program monitors forest health throughout Missouri

The Forest Health Program is a cooperative effort between MDC and other state and federal agencies to conserve Missouri's forest resources by monitoring and evaluating forest health and providing forest health management information to Missouri residents. Monitoring activities document and evaluate ongoing threats to forest health. Among the threats are oak decline and oak wilt, and sporadic events such as insect outbreaks, storms and drought. MDC conducts annual statewide surveys in partnership with other agencies to detect

introductions of the gypsy moth and emerald ash borer—two invasive species threatening to cause severe forest losses.

Diagnostic laboratory services are provided on all forms of forest insect and disease agents. Forest and pest management recommendations are developed based on monitoring and diagnostic activities and provided to private landowners, MDC staff, forest managers, arborists and the green industry. Forest health information is given to stakeholders through workshops, diagnostic reports, magazine and Web site articles, media releases and the Forest Health Update newsletter.

The Forest Health Program staff cooperates with university and USDA Forest Service researchers in studies that examine forest-harvesting impacts on forest insect populations. They also share information about the identification of insects that transmit the oak-wilt fungus in Missouri.

## **Professional Timber Harvesters Program**

We work closely with Missouri's forest products industry to monitor the use of our state's forest resource. The Missouri Forest Products Association and Forestry Division jointly sponsor logger training courses aimed at educating loggers about forest management principles, introducing new techniques and concepts, and enhancing the safety of timber-harvesting operations. More than 250 loggers have been through the program in Missouri.



# Study, regulation changes benefit anglers and hunters

Catfish harvest management: The Catfish Harvest Evaluation Project is a five-year statewide study that began in 2005 and is designed to provide information about the population dynamics, harvest, movement and nest success of flathead and blue catfish in selected Missouri rivers. MDC biologists are sampling catfish in segments of eight rivers throughout Missouri, sampling approximately 349 river miles by tagging fish with radio tags and \$25 reward tags that are returned by anglers. We are also studying flathead catfish nest success, spawning behavior and fecundity at one of MDC's hatcheries.

White-tailed deer management: Significant changes in statewide deer regulations have been put in place to simplify regulations and improve our ability to manage deer numbers. These changes include county level management, unlimited issuance of antlerless permits in most counties, four-point antler restriction, and an urban counties portion of the firearms season.

Recommended regulations for 2007 reflect a continuing effort to take large numbers of does, targeting counties where deer numbers exceed desirable levels. Proposed regulations include minor adjustments to achieve desirable harvests and improve hunter satisfaction.

**Hunting:** The Department has expanded opportunities for the more than one-quarter of Missourians who consider themselves hunters, while maintaining hunting as a high-quality experience that is beneficial to Missouri's economy. Unlimited antlerless deer permits for many counties, more no-cost any-deer and antlerless deer permits for resident landowners, the Managed Deer Hunt Program, and additional urban deer harvest opportunities help maintain deer populations at herd levels desired by landowners and hunters.

The waterfowl-hunting procedure piloted on two wetland areas during fall 2004 and fall 2005 hunting seasons was expanded to six conservation areas in fall 2006. During the 2005 season approximately 10,800 duck-hunting trips were provided on five of MDC's wetland areas. By changing the drawing procedures in 2006 we were able to provide approximately 14,200 hunting trips on those same five wetland areas. The revised procedures not only provide additional opportunity for waterfowl hunters, but they also encourage novice hunters and allow for better use of available hunting opportunities.

In addition, MDC provides managed deer hunts, disabled-user hunts, youth-hunting opportunities and limited access for hunters with physical limitations that prevent them from participating in most activities.

MDC has expanded the management of conservation areas to provide dove-hunting opportunities to more than 70 counties—increasing opportunities closer to home for many hunters. Youth-only portions of deer, turkey and waterfowl hunting seasons not only preserve family values related to hunting traditions, but create opportunities for youth to develop a strong personal connection to

nature. Checking game harvest by telephone is also more convenient for hunters and allows for more efficient reporting of harvest totals.

## Brought code violators to justice

## **Operation Game Thief and Forest Arson:**

Operation Game Thief/Forest Arson continue to be successful programs which help catch wildlife poachers and forest arsonists. The programs allow anonymous callers to report violations, and callers are eligible for rewards if arrests are made from their calls. Last year Operation Game Thief (OGT) produced 290 convictions from 742 telephone calls. This 39 percent arrest rate based on calls illustrates the high-quality of information from OGT callers and the investigative skills of conservation agents. In FY07, \$12,025 in reward money was paid to callers.

**Revocations:** Missouri is a participating state in the Interstate Wildlife Violator Compact (IWVC). The compact—a legal organization of 26 member-state wildlife agencies-agrees to reciprocally honor revocations/suspensions of hunting, fishing and trapping privileges for wildlife-related violations. During the last fiscal year 845 people from other states had their privileges revoked in Missouri through provisions of the compact. An additional 137 were revoked for cause by the Conservation Commission in Missouri and submitted to the IWVC. Participation in the compact also benefits Missourians who travel to other compact member states for hunting and fishing activities. If found in violation, they may be given the opportunity to resolve the citation by mail rather than being required to post a bond before leaving the member state. They are subject to revocation by all compact states if the citation is ignored.

# Programs assisted disabled hunters and anglers

Hunting Method Exemption and Group Fishing programs: Both the Hunting Method Exemption program and the Group Fishing program are designed to assist disabled hunters and provide opportunities for educational or rehabilitation groups to experience fishing. During the last fiscal year, we issued 2,966 hunting method exemptions to help disabled hunters enjoy Missouri's outdoors. We also issued 221 group fishing permits to help Missourians who otherwise might not be able to participate and learn about outdoor fishing activities.

# Helped thousands learn how to participate in and enjoy fishing

Angler recognition programs: MDC presented a First Fish certificate to 1,608 anglers for catching their first fish. We issued Master Angler awards to 430 anglers who caught large game fish that equaled or exceeded minimum size requirements. We also issued three new state records to anglers who caught fish that exceeded the recorded maximum sizes known for a given species in Missouri. These included new records for alligator gar, spotted gar and longear sunfish.

#### Making fishing information more accessible:

Efforts to improve sport fishing content on MDC's Web site continued in FY07. We added a new section on catfish, provided interactive fish attractor maps for selected reservoirs and maintained a series of seasonal features on a variety of aquatic topics. Interest in the Statewide Weekly Fishing Report continues to grow, with more than 14,000 subscribers each week of the fishing season. We also maintain a library of about 181 fisheries publications and produced 30,000 copies of the popular guide, "2007 Fishing Prospects at Selected Missouri Lakes and Streams."

Kids fishing days at the trout parks: For the fifth consecutive year, a record for attendance was set for Kids' Fishing Day (KFD) at the trout parks. Based on the number of free daily tags given to youngsters 15 years of age or younger, combined attendance at the May 2007 KFDs held at Bennett Spring, Maramec Spring, Montauk and Roaring River was 5,695. Bennett Spring, Maramec Spring, and Roaring River set new park records for their May 2007 KFDs, while Montauk came close to matching its record set in 2006. A review of the numbers confirms the popularity of the KFD program, and the consistent upward trend in youngsters out to enjoy angling and related activities.

# **Urban fishing opportunities**

MDC strives to provide high-quality fishing opportunities for all Missourians, including those living in urban areas. During 2006, approximately 160,000 keeper-sized fish were stocked in 56 urban impoundments. This included more than 98,000 channel catfish, 45,000 rainbow trout, 12,300 brown trout and 5,300 carp.

# **Increased trout-fishing opportunity**

One of the objectives in a Plan for Missouri Trout Fishing is to increase catch-and-release opportunities in the trout parks. With the cooperation of the Missouri Department of Natural Resources, the winter catch-and-release season at Bennett Spring, Montauk and Roaring River state parks was expanded from three days to four days per week during the mid-November to mid-February season. The change to four days per week for the 2006-07 winter catch-and-release season went smoothly, proved popular with anglers and will be continued. In addition, a new winter trout area was established at Spur Pond in Kirksville. Acquisition of the Bohigian Conservation Area provided new public access to 1.26 miles of the Mill Creek Blue Ribbon Trout Area. We installed fish-habitat structures to improve the trout population of the Barren Fork Blue Ribbon Trout Area and to enhance angling success in Maramec Spring Park.

# Trout hatchery improvements

The Conservation Commission, at its August 2004 meeting, approved an extensive program of trout hatchery improvements to support goals and objectives in "A Plan for Missouri Trout Fishing." During FY07, we completed priority projects at Roaring River, Shepherd of the Hills and Montauk hatcheries. At all three hatcheries, we began using the dissolved oxygen management and degassing systems that will significantly improve waterquality management. We continued large-scale construction at Shepherd of the Hills Hatchery. including a brown trout-rearing complex, fish ladder, additional rearing space and netting to reduce bird predation. Planning also was initiated for additional projects at Montauk, Roaring River, Maramec and Bennett Spring hatcheries.

# Banner year for warmwater fish production

MDC's warmwater hatchery system produced enough fish to meet stocking needs in Missouri and provide fish for trading to other states in FY07. Lost Valley Hatchery produced 1,202,059 hybrid striped bass for Missouri waters and 40,475 that were traded to Nebraska in exchange for their providing us with Merritt strain walleye in the past. Lost Valley also shipped or stocked 165,000 channel catfish including 37,166 that were sent to Mississippi to help re-establish fisheries devastated by Hurricane Katrina. Lost Valley produced 4,957 muskellunge and worked together with Blind

Pony Hatchery to produce 661,085 paddlefish fry. Chesapeake Hatchery produced 1,177,166 bluegill, 741,516 walleye fingerlings and 483,410 channel catfish fry that were sent to other warmwater hatcheries for rearing to larger sizes. Another 398,867 channel catfish fry were sent to Iowa in exchange for future shipments of muskellunge fingerlings.

# Walleye and sauger in the upper Mississippi River

Walleye and sauger are important recreational fish species in the Upper Mississippi River. Angling for these species primarily occurs during the fall and winter months. We initiated an assessment in 2005 to gather the necessary population information needed to conserve and improve these fisheries. During 2005 and 2006, staff captured walleye and sauger and tagged a portion with reward tags. Results to date indicate that sauger are more abundant than anticipated and they grow well. However, they experience high natural mortality, which suggests that more restrictive harvest regulations are unlikely to improve fishing.

# New youth fishing program

GO FISH! is a new, multi-faceted program to teach fishing and environmental stewardship to St. Louis children (ages 8-15). The program is designed around seven different "hooks" or lessons that provide aquatic education and fishing instruction, as well as highly successful fishing opportunities. All children received free fishing equipment after each "hook," and upon graduation, have everything they need to go fishing. In addition, GO FISH! served physically and mentally challenged anglers from the St. Louis Urban Fishing Program. GO FISH! is conducted with help from 65 volunteer angler instructors and coaches and 44 children's or adult therapeutic groups. The program is conducted at three areas designated as Conservation Fishing Centers. In addition to outstanding volunteer support, GO FISH! has received donated equipment and money from 14 corporate and notfor-profit sponsors.

# Crane Lake cooperative efforts

MDC and the U.S. Forest Service worked to improve fishing and angler access at Crane Lake, a 100-acre Forest Service lake in Iron County. To enhance fish habitat, we planted a variety of aquatic plants within protective exclosures, which were purchased by the Forest Service. Staff from

both agencies worked together in placing two dozen hardwood fish attractors along the shoreline. The lake's gravel boat ramp, accessible only to four-wheel drive vehicles, was replaced with a concrete ramp funded under a 50-50 cost share between the agencies.

# Blind Pony Lake ready for full production

Blind Pony Lake was built in 1967 to serve as the water supply for Blind Pony Hatchery, but an accumulation of sediment and nutrients reduced the amount and quality of water available to raise fish. With financial contributions from the U.S. Army Corps of Engineers, MDC renovated watersupply lines, deepened the lake and built a sturgeon culture building. All will benefit pallid sturgeon and other fish of importance to the Missouri River. The lake refilled during the last year, which permitted limited fish-culture to resume. With a full lake and completed fish-hatchery facilities, we anticipate being back to full production at Blind Pony next year.

# Table Rock/Taneycomo National Fish Habitat Initiative

Working with Bass Pro Shops, the Arkansas Game and Fish Commission and the National Fish and Wildlife Foundation through the National Fish Habitat Initiative (NFHI) and the More Fish Campaign, MDC is continuing to implement habitat enhancement projects in Table Rock Lake, Lake Taneycomo and their watersheds.

A feasibility study by the Tennessee Valley Authority to more fully assess a forebay liquid oxygen diffuser system for Table Rock Dam has been co-sponsored by the MDC and the US Army Corps of Engineers. Cost-share funding has been directed to the James River Basin Partnership and Table Rock Lake Water Quality Inc. to assist with septic tank pumpout programs which will enhance and protect water quality in Table Rock Lake's watershed. We have conducted many on-site landowner visits and provided technical support in areas needing streambank and corridor improvements. Plans call for using cost-share funds on several related projects in the near future. We also plan to perform a survey and assessment of stream corridor conditions in portions of the Table Rock watershed. The placement of fish habitat (brush structures and rock structures, for instance) in Table Rock Lake will begin in fall 2007. Additional work is being considered for the upper reaches of Lake Taneycomo.

During the next five years, as much as \$4.5 million in NFHI funds will be expended on these efforts. MDC has made a five-year commitment to the NFHI project beginning in FY07 at \$100,000 per year. At the same time, efforts continue to enhance the tailwater trout fishery in Lake Taneycomo with improved flows.

# **More Community Assistance** Program agreements executed

Through the Community Assistance Program (CAP) and the closely related Corporate and Agency Partnership Program (CAPP), MDC enters into agreements (usually 25-year) with cities, counties, state and federal agencies, businesses, foundations, schools and colleges to provide fisheries management at existing lakes and ponds, and to cooperatively develop and maintain facilities for anglers and boaters at lake and stream areas. MDC has agreements with 114 partners for the cooperative management of 146 public lakes (9,236 acres of water), 41 stream-access areas, four lake-access areas and six aquatic-resource education ponds.

MDC and its partners constructed fishing and motorboat access facilities at Jack Floyd Memorial Lake (Bowling Green), West Lake (Bowling Green) and Tipton Park Lake (Tipton). The Jack Floyd Memorial Lake project was partially funded through the Federal Aid in Sport Fish Restoration program administered by the U.S. Fish and Wildlife Service. MDC assisted the U.S. Army Corps of Engineers with the construction of two spillway staircases at the Wappapello Lake Spillway Recreation Area and helped the city of Neosho with stream-bank stabilization along Hickory Creek in Morse Park.

MDC executed new CAP and CAPP agreements with two partners and amended existing agreements with five partners (usually to provide new programs or facility development).

## Missouri Archery in the Schools Program

In 2007, MDC—in collaboration with the Missouri Conservation Federation—became the Missouri coordinating agency for the National Archery in the Schools Program and provided advanced training for all the Outdoor Skills specialists. The program is designed to teach international-style target archery in fourth- to 12th-grade physical-education classes. Core content covers archery history, safety, technique, equipment, mental concentration and self improvement. In addition, the curriculum provides interesting and creative possibilities for integration with core content in social studies, mathematics, visual arts, history and English/language arts. Archery is a non-discriminating sport and one at which nearly everyone can be successful regardless of age, size or physical ability. Statistics show that school archery programs engage more students in the educational process, improve classroom performance and reduce drop-out rates.

## Developed three shooting ranges

Four new shooting ranges were developed last year. One was a public range at Indian Trail Conservation Area. Two others were developed in partnership with communities which share in the cost of development and/or maintenance. The Apple Creek range in Cape Girardeau was a joint effort between the Cape County Gun Club and MDC. The newly completed range at Trenton combines MDC efforts with the city of Trenton to provide shooting opportunities to the public.

The fourth range was developed at Fort Crowder. In addition, staff maintained established ranges on 33 conservation areas throughout the state.

# Encouraged and mentored new hunters and anglers

Employees and volunteers provided more than 700 programs with instruction in hunting, fishing, trapping and shooting sports. More than 45,000 people took part in these programs, which were aimed at increasing participation in and knowledge of traditional outdoor recreation. Missouri celebrated its 50th year of hunter education and certified its one millionth student. We offered more than 1,000 Hunter Education classes to 29,000 students and piloted an on-line Hunter Education training module. The module, coupled with a five-hour field day, provides an alternative to the traditional 10 hours of lecture. It offers flexibility to busy people who want to meet the Hunter Education requirements. Development and expansion of this pilot Hunter Education delivery model will continue next year.

# Mourning dove-banding program has national significance

The Mourning Dove National Harvest Management Plan provides a vision for improving the reliability of information used in establishing hunting season frameworks in each of the three management units across the United States. Annual data

from banding doves throughout the country (and specifically in Missouri) provides one piece of information needed to develop a set of population models for guiding harvest management decisions. developing a set of alternative harvest regulations and determining management objectives for mourning doves. Specifically, information from a national banding program informs managers about changes in population abundance, survival, harvest rates and population growth rates. In combination with other information, banding data also can be used to help estimate annual recruitment of young birds.

# Program monitors Missourians' attitudes about deer

Deer-population management decisions are based on biological and social information. As deer populations have increased, information about how the public views deer has become more important and is used to help determine deer-population goals. In this respect, the two most important surveys that we conduct are the hunter survey and landownerattitude survey. We choose randomly selected firearms deer hunters and production landowners. We ask them questions about their perceptions of deer numbers, deer management and other deerrelated issues. The results provide valuable information about public attitudes that help us make deer-management decisions. Consequently, we endeavor to balance the resource with the majority of opinions from these two important constituent groups.

# 2006-2007 waterfowl hunting season one to remember

Waterfowl hunters benefited from cool conditions early, abundant duck numbers throughout the season, favorable hunting weather and few days limited by ice. All these conditions contributed to an excellent season for those who had water. Southeastern Missouri had the most water and west-central, the least. In much of the state, habitat and hunting opportunities were mainly limited to private and public areas with water-pumping capabilities. One of the most significant migrations in recent years occurred on Halloween. The numbers of hunters, the number of trips per hunter and the average daily harvest increased to result in a 2006-07 duck harvest of 570,600 compared to 426,100 in 2005-06. It is the highest recorded during the last several years.

Approximately 15 percent of the statewide harvest occurred on MDC managed wetlands, similar to other years. During 2006-07, similar numbers of people (15,100) hunted geese compared to 2005-06 (14,600) and harvested comparable numbers of Canada geese (58,600 vs. 51,800 in 2005). Goosehunter numbers were similar to earlier years; however, last season's Canada goose harvest was the second highest since 2000. During the 2006-07 regular season, 6,600 hunters harvested 44,400 light geese, which was similar to previous high harvests. The total 2006-07 light-goose harvest of 206,900-including the regular season and Conservation Order during the spring—was similar to the record of 210,700 established in 2001-02.

# **Teaching Missourians About** Fish, Forest and Wildlife Resources

# Internships encouraged diversity, aided students and MDC

Our stewardship of Missouri's fish, forests and wildlife carries the responsibility of sustaining these natural resources not only for current generations, but for future ones, as well. It also carries the need to recognize that future generations likely will represent a vastly different population which reflects many cultures and backgrounds. MDC has a long-standing commitment to understanding the needs of Missouri citizens and accepts the challenge of staying in tune with our diverse stakeholders. One way to remain focused is through various diversity outreach programs.

MDC began its fourth year of a very successful internship program which creates experiences for students in the area of conservation, while addressing recruitment needs of MDC. Objectives are threefold: expose students to a variety of professional tasks and MDC's culture; mentor promising students in disciplines in which job candidates are scarce; and attract students with diverse cultural backgrounds to contribute to MDC's workforce and mission accomplishment. Internships are provided at both the undergraduate and graduate levels, and length of internships typically run concurrently with college semesters or summer breaks. Acceptance for an internship requires a minimum of a 2.8 GPA for undergraduates and a 3.0 for graduates and the successful completion of MDC's interview process.

In FY07, 22 students worked in a variety of internship positions which were diverse in both location and job responsibilities. The students represented 15 colleges and universities and had a combined 3.4 GPA. Internship demographics included men, women, African-American and Hispanic.

# Missouri forests aided by **MDC-supported volunteers**

Missouri Forestkeepers Network: MDC collaborated with Forest ReLeaf of Missouri to support statewide recruitment and coordination of volunteers participating in the Missouri Forestkeepers Network. The Forestkeepers program is a volunteer, self-driven network of those interested in forest and forest monitoring. Volunteers worked more than 22,438 hours on a variety of activities.

Wildland fire-suppression training and the Midwest Wildfire Training Academy: MDC supports volunteer fire departments in many ways. One way in particular is by providing annual wildland fire-suppression training to fire departments throughout the state. We conducted 28 sessions and trained more than 565 local firefighters in fire behavior, suppression techniques and safety at no cost to the fire departments or the volunteers. In addition, we also provided instructors and logistical support for the Midwest Wildfire Training Academy held in Jefferson City each year. This academy draws thousands of participants from throughout the state and the Midwest.

# **Putting the Learning Outdoors School Program into action**

In this pilot year, 33 middle schools with 2,431 students received grants to participate in the Learning Outdoors School Program. We also provided an additional 318 schools with conservation grants for outdoor classrooms, equipment and busing costs for field trips. Grants to schools exceeded \$185,000. We completed a revision of the middle school Learning Outdoors Aquatic Education instructional unit, and began work on both the elementary school Wildlife and Habitat unit and the high-school Conservation Ecology unit.

### **Exhibits aid communication**

We completed a major renovation at the Powder Valley Nature Center in St. Louis, which incorporated rotating exhibits. Four exhibits—two of which were installed at Powder Valley—will be moved annually among the conservation nature centers and MDC offices. These exhibits provide the opportunity for cost-effective communication of key messages at a variety of facilities.

# Partnership with the Missouri **Department of Transportation**

In conjunction with the Missouri Department of Transportation, we provided free trees to many non-profit groups. Scout troops, stream teams, school groups, conservation groups and communities used them for tree-planting projects in both urban and rural areas. This program enhances the ability of both agencies to promote an awareness of Missouri's forests and to increase citizens' understanding of the many benefits trees provide.

## Field days for landowners, loggers

For the first time, we hosted two special field days in Salem and Fulton to bring landowners and loggers together to discuss and view forest management practices. They were designed to allow each group to gain a better understanding of each others' concerns. Participants left with a new appreciation for the constraints and issues others have.

# Helping citizens discover, use and enjoy Missouri's outdoors

More than 1 million visitors experienced our conservation nature centers and shooting-range/outdoor-education centers. These facilities offered a wide variety of programs, with more than 300,000 citizens participating in these learning opportunities.

Citizen involvement in conservation also was fostered by volunteer programs such as Master Naturalists. This program provided the requisite 40 hours of training to an additional 140 volunteer master naturalists who, in turn, will serve as conservation ambassadors in their communities.

Grow Native!—a joint program with the Missouri Department of Agriculture, which focuses on promoting the uses of native plants-continued to gain ground. Twenty-six Grow Native! workshops were held throughout the state to inform, educate and involve citizens in the use and promotion of native plants.

We redesigned the Missouri Conservationist magazine, which goes monthly to one-quarter of Missouri households. The revision reflects the goals and commitments to the public that are outlined

in MDC's strategic plan, The Next Generation of Conservation. The new design provides the public with more information on conservation activities and programs. Additionally, it provides a mechanism for MDC to report progress on the promises we have made to serve the citizens and protect and manage the forest, fish and wildlife resources of our state.

# Supporting Conservation in Our Communities

# Grants help volunteer fire departments

MDC, in cooperation with the U.S. Forest Service, provided more than \$281,000 in grants to more than 140 volunteer fire departments. These grants help fund protective clothing, equipment and training.

# Helped Missourians help others through meat-donation program

Conservation agents coordinate and support the Share the Harvest program with the Conservation Federation of Missouri, local charitable organizations and local meat processors. Together these groups have supported the donations of more than 130 tons of meat each year the last two years. During FY07, approximately 6,584 hunters donated 322,500 pounds of venison to less fortunate Missourians. Since the inception of the program, more than 709 tons of deer meat have been donated to Missouri citizens. Hunters who wish to donate their entire deer may receive a \$35 reduction in the processing price. The \$35 is paid by the Missouri Conservation Federation. Hunters also may designate part of their deer to be donated to the Share the Harvest program.

# Agents continued outreach efforts

Conservation agents represented MDC at 6,300 meetings to civic groups, schools, church groups and a wide variety of other organizations. Agents completed 13,400 radio and television programs, published 4,400 newspaper articles and conducted 2,500 public exhibits. As part of their community relations efforts, agents contacted more than 550,000 citizens and answered more than 126,500 telephone calls.

# Birds aided by conservation initiatives

A variety of conservation partners, who are promoting "all bird" conservation in Missouri, have established common goals and strategies for data collection, monitoring and evaluation. By providing matching funds, the Missouri Bird Conservation Initiative (MoBCI) Grant program funded projects from many different organizations and partners. MoBCI represents a broad range of interests which include game and non-game bird species. Forty-four conservation-oriented organizations and four private citizens have contributed funds to this voluntary partnership of diverse groups.

An All-Bird Conservation Team helped coordinate bird-related initiatives such as Partners in Flight, Northern Bobwhite Conservation Initiative, North American Waterbird Conservation Plan, North American Waterfowl Management Plan and the U.S. Shorebird Conservation Plan. MDC helped Audubon Missouri develop Important Bird Areas, which is the National Audubon Society's part of an international effort to identify and conserve the areas that are the most important for sustaining bird populations. MDC provided matching funds for a director of bird conservation who works on various cooperative projects identified through the Important Bird Area program.

# Outreach program brought attention to forestry resources

MDC and the Missouri Community Forestry Council jointly sponsored the Missouri Arbor Award of Excellence program. This program recognizes communities throughout the state that act as good stewards of their tree resources. Award categories include municipalities/governments, organizations, businesses and individuals.

# Severe weather brings renewed interest in trees

Missouri towns experienced devastating weather in FY07. Most notable were the straight-line winds that hit the St. Louis metropolitan area late in summer 2006 and the massive ice storm in January 2007, which coated one-third of the state with ice up to 2 inches thick. Both these events caused massive power outages, some lasting 14-17 days. While the community forest sustained massive injury, the silver lining is a renewed interest in trees and their values.

We worked tirelessly in storm-damaged areas to provide assistance to municipalities, schools, counties and homeowners. These contacts have resulted in a dramatic increase in the number of applications received in the Tree Resource Improvement and Maintenance cost-share program. In addition, our Conservation Commission allocated an additional \$250,000 for this program to be spent in the counties which were part of the ice-storm disaster declaration. Those funds will be spent in the coming fiscal year.

# St. Louis Community Conservation Stewardship Grants awarded

MDC awarded almost \$150,000 under the Community Stewardship Grant Program (CSGP) projects in St. Louis. MDC received 25 applications for project funding from the FY07 Community Stewardship Grant Program.

Applications came from a diverse group of organizations and agencies in the St. Louis metropolitan area, including municipal and county parks departments, non-profit planning agencies, and non-profit community and conservation organizations. Most applicants requested near or at the suggested maximum of \$15,000. The total amount requested was \$332,295. Honeysuckle removal was the most frequent project objective, with 10 of the submitted project applications involving significant honeysuckle removal efforts.

Following a rigorous selection process which involved seven regional staff from five divisions, 12 projects were selected for funding. The total amount awarded for these projects is \$147,249.69.

The following projects were funded at the listed amounts through FY07 Community Stewardship Grant funds:

- Ferguson-Florissant School District—Little Creek honeysuckle removal, \$15,000
- Open Space Council and ARCHS—Operation Wild Lands, \$15,000
- Grace Hill—Riverfront Park habitat restoration, \$15,000
- The Green Center—Calvary Cemetery prairie restoration, \$22,480
- Forest Park Forever—Honeysuckle removal, \$13,527.49
- Gateway Greening—Native plant establishment program, \$12,766.70
- City of Olivette Parks and Recreation—Invasive plant control, \$14,402.25
- RegionWise at St. Louis University—Rain gardens in Hazelwood School District, \$15,000

- Spoede School Association—Spoede Elementary habitat restoration, \$4,930
- Operation Brightside—Community Connection grant, \$14,700
- St. Louis County Parks—Exotic plant control, \$1,618
- City of Sunset Hills Parks and Recreation— Gempp Conservation Area honeysuckle removal, \$2,825.25

These projects were selected because they best met the three central goals of the CSGP, and also had clearly defined objectives which are relevant to the conservation of fish, forest and wildlife resources. In keeping with the goals of the CSGP, these projects have strong emphasis on citizen volunteering and partnerships, with commitments from other groups to provide additional project funding, resources and expertise.

Each organization awarded FY07 funds has a grant agreement with MDC which, among other things, identifies "measurable deliverables" to be accomplished through the course of the agreement. Regular contact with project leaders and quarterly reports will help us ensure that projects are on task and the "deliverables" accomplished by the end of the agreement.



## Nursery helps reforest state

The state forest nursery annually grows and distributes approximately 5 million seedlings of more than 50 species. The seedlings include trees and shrubs suitable for reforestation and wildlife habitat restoration activities. The seedlings are planted on both public and private land throughout the state.

# Provided financial assistance for landowners to improve state's resources

Approximately 607 private landowners received nearly \$1.1 million in cost-share funds to implement beneficial habitat-management practices for fish, forest and wildlife resources. The funds helped install 1,000 individual conservation practices.

# Partnerships strengthen support to landowners

Staff developed approximately 26 partnerships with federal, state and non-governmental organizations. These partnerships helped MDC enhance technical and financial assistance and equipment support to landowners interested in improving fish, forest and wildlife resources. Some examples: assisted Missouri USDA with developing and applying \$150 million in Farm Bill conservation programs; collaborated with Missouri Soil and Water Conservation districts to provide native warm-season grass drills to Missouri landowners; and leveraged more than \$100,000 with Pheasants Forever.

# Technical assistance provided to landowners

Field staff provided timely and responsive service through approximately 20,062 rural and urban landowner contacts, including more than 9,665 on-site landowner visits. Staffers offered technical assistance to landowners who wanted help with habitat management plans toward achieving their land-use objectives. Staffers also answered 4,634 requests for wildlife nuisance and/or damage assistance, including 906 on-site visits.

Conservation agents provide technical assistance, as well. They inspect ponds up to three acres in size, which are stocked free throughout Missouri. During FY07, agents made 23,617 resource management contacts. They delivered 134,585 pounds of food plot seed to 3,442 Missouri landowners in the MDC-administered Missouri Seed program. Agents also assisted with controlled burns, fish stocking and a variety of other management duties on public lands.

# Habitat-management workshops were popular with landowners

MDC staff conducted or participated in more than 723 individual events involving private-landowner habitat-management workshops. More than 39,443 people attended the workshops that focused on management techniques to benefit early successional wildlife species such as bobwhite quail, rabbit and grassland-bird species. Wildlife damage biologists gave 68 public programs on trapping and damage prevention to 4,150 participants. In addition to providing programs on conservation-related topics, the biologists regularly interact with statewide media.

# Assisted NRCS in wetland restoration efforts

MDC has assisted the Natural Resources Conservation Service (NRCS) in obligating more than \$147.6 million since 1992 to restore wetlands back into the agricultural landscape. Wetland teams composed of MDC and U.S. Department of Agriculture staff completed restoration aspects on 33 Wetland Reserve Program easements. This accounted for 5,800 acres, which included emergent marsh and bottomland hardwood restorations during FY07. Missouri has recorded 812 easements which cover 119.339 acres.

# Private landowners benefited from MDC's leadership and financial assistance

Private Land Services field staff provided private landowner financial assistance to support implementation of more than 13,000 acres of habitatmanagement practices. These practices targeted bobwhite quail, grassland songbirds and related early successional species. MDC completed implementation of a \$138,000 Conservation Partnership Initiative grant from the Natural Resources Conservation Service to restore bobwhite quail populations in targeted geographies. Staff provided leadership in the development of quail and grassland bird plans in each of the eight MDC regions.

# New habitat buffers installed to benefit upland birds

The newest USDA Farm Bill program, the Conservation Security program, is resulting in some landscape-level changes in some of the most intensive agricultural landscapes in the state. More than 15,000 acres of native-grass field borders and more than 50,000 acres of rice-field reflooding are being installed through the program. The newest Conservation Reserve Program practice, CP33 Habitat Buffers for Upland Birds, has committed more than 23,000 acres of the 32,600 acres allotted to Missouri. Field staff report frequent sightings of quail and quail broods in and near the new buffers.

# Gave landowners access to habitatenhancement tools; maintained outreach

Private Land Services worked with Soil and Water Conservation districts and related conservation partners to purchase 12 native warm-season grass drills for use in key MDC geographies for bobwhite quail and grassland songbird habitat efforts.

Private Land Services provided financial support and participated in many of the major agricultural conferences and trade shows throughout the state. Among them were the Governor's Agriculture Conference, Farm Bureau Annual Conference, Missouri Cattlemen's Annual Conference, the Missouri Association of Soil and Water Conservation Districts Annual Training Conference, Agricultural Leaders of Tomorrow, and the Farm Bureau, Young Farmers and Ranchers Annual Conference.

# **Dove Agroforestry Project benefits** private landowners and doves

The Dove Agroforestry Project is a broad-scale cooperative venture with the University of Missouri's Center for Agroforestry, University of Missouri School of Fisheries and Wildlife Sciences, the U.S. Fish and Wildlife Service—Webless Migratory Game Bird Research Program and the Missouri Department of Conservation. Knowledge generated from this project will:

- 1. guide management decisions for private landowners combining agroforestry practices and managed dove hunting fields,
- 2. provide information about relationships between observed recruitment from radio marked doves and fall age-ratios from hunterkilled doves,
- 3. compare actual and reported crippling rates during the hunting season, and
- 4. provide information on harvest rates on a heavily harvested local population of mourning doves.

Accomplishments from the first field season include: 1,448 trees planted, 152 subcutaneous transmitter implant surgeries conducted in the field, 25 nests located by following movements of female mourning dove implanted with subcutaneous radio transmitters, 10 nestling surgeries conducted to implant subcutaneous radio transmitters, 57 mortalities or dropped transmitters noted (not including birds killed during first three days of the hunting season), more than 2,000 locations from radio-marked doves recorded, 738 mourning doves banded and 212 recaptured, and an automatic data collection system was designed and implemented.

Thirty-nine birds with radio transmitters were detected on opening day of the hunting season; the next day 10 were shot and recovered and two were crippled and located. In all, and 26 radioed doves were killed during the first three days of the season.

# Private lake and stream management assistance

We responded to 7,579 requests for watershed, floodplain, riparian corridor and stream or lake management information and technical assistance on streams or lakes. We made 1,435 on-site visits and wrote 182 recommendation letters or management plans. On-site work included 253 fish population surveys, 309 stocking inspections and 45 fish-kill investigations. Staff conducted 39 stream or lake management workshops attended by 1,176 people. We also coordinated or participated in 69 active watershed-focused resource management projects.

# **Forest Land Enhancement Program** awards \$1 million to landowners

We closed out funds for the Forest Land Enhancement Program, which was funded through the U.S. Forest Service and implemented by MDC. During a four-year period, we funneled \$1 million to more than 300 landowners throughout the state. This program helped Missouri citizens improve the health and sustainability of their forests.

# **Conservation Reserve Enhancement Program**

MDC collaborated with the USDA Farm Service Agency, USDA Natural Resources Conservation Service, Missouri Department of Natural Resources, Missouri Department of Agriculture, and the Missouri Association of Soil and Water Conservation Districts to establish a 40,000-acre Missouri Conservation Reserve Enhancement Program (CREP). CREP is part of the Conservation Reserve Program (CRP) established under the 1982 federal Farm Bill. Under the program, landowners contract to take erosion-prone crop and pasture acreage out of production for 14 to 15 years. They receive annual payments on a per-acre basis.

The goal of CREP is to improve drinking-water quality, protect public health, enhance bobwhitequail and grassland-bird habitat and conserve soil and water on agricultural cropland in approved Missouri watersheds. Under the agreement, MDC provided up to \$1 million during FY07 for incentive payments to landowners to match up to \$50 million in federal monies. The payments of \$100 per acre encouraged landowners to plant native grasses, wildflowers, trees and shrubs or to restore wetlands. At the end of the fiscal year, CREP had

more than 8,000 acres under contract with several thousand more in the application process. This was the first year of a two-year agreement.

# Implemented conservation equipment grant program

In response to increasing requests to support purchases of habitat-related agricultural implements, MDC designed and initiated the Conservation Equipment Grant Program. The program targeted partner organizations that assist MDC with delivering beneficial private-land habitat programs and technical assistance to private landowners across the state.

We awarded approximately \$100,000 in grants to 12 separate cooperating organizations for items such as native grass drills and prescribed-burn equipment. In turn, the groups provided \$36,000 in matching funds and agreed to pay back 75 percent of MDC's contribution within five years. Each entity signed a cooperative agreement. Participating partners include the Missouri State Quail Unlimited Council, Pheasants Forever and several individual county Soil and Water Conservation District offices. In exchange for funding, the groups maintain the habitat equipment, handle all coordination with landowners and provide annual summary reports to MDC.

# New CRP program for upland birds evaluated

In 2004, United States Department of Agriculture-Farm Services Agency (USDA-FSA) announced a new continuous CRP program under the Farm Bill called CP-33 or Habitat Buffers for Upland Birds. Under CP-33, landowners receive payment for establishing bird-friendly vegetation on previously cropped acres in a 30- to 120-foot buffer on the edges of row-crop fields.

With this new conservation practice, USDA-FSA also mandated a national monitoring and evaluation plan to measure the response of birds to this program. This is the first large-scale effort to monitor the impacts of a Farm Bill habitat program on wildlife. Missouri's monitoring effort consists of 60 sample plots enrolled in CP-33, paired with 60 control plots that are not enrolled in the program. We survey all grassland birds during the spring breeding season and conduct fall covey counts on bobwhite quail in October of each year.

We are preparing for our third fall-covey sampling effort and have completed two seasons of breeding-bird surveys. We also monitor the establishment and growth of the vegetation planted in the buffers. The buffers are one to three years old and are becoming suitable nesting and brood-rearing habitat for grassland birds.

# Serving Nature and You on Conservation Areas

## Older wetlands upgraded

An interdisciplinary team of wetland experts continues to develop plans for rehabilitation of five of MDC's oldest wetland management areas (Fountain Grove, Duck Creek, Montrose, Schell-Osage and Ted Shanks). Phase II of the renovation at Fountain Grove was completed and represents approximately one third of the total project. Work began at Ted Shanks Conservation Area and approximately one-half of this project is complete. Engineering design is in progress for Montrose Conservation Area. We replaced—due to age some of the levees, pipes, pumps, flood valves and other structures critical to managing these wetland areas. We've also completed preliminary plans for additional rehabilitation of management structures on the remaining wetlands. We've established a diverse assemblage of conservation partnerships necessary to secure federal grants.

## Equestrian trail improvements made

We completed major renovations of equestrian trails at Forest 44, Rudolph Bennett and Angeline conservation areas. These renovations will enhance equine recreational opportunities on these areas. In addition, the renovations will reduce the soil erosion and significantly improve water quality in local streams.

## Online atlas improved

We made a comprehensive update to the Department's online conservation atlas in FY07. Information about the features, facilities and recreational opportunities available on each of 1,000-plus conservation areas owned or cooperatively managed by MDC is available from any device with Internet access. Searches of the atlas can be made based on county, region, area name, activity, feature or natural area of interest. For many areas, an online brochure and map also are available—along with driving directions, contact phone numbers and a summary of area highlights. A companion

regulations database, linked to the atlas, provides information on regulations and seasons relating to hunting, fishing, camping and other outdoor activities on each area.

# Study seeks ways to control reed canary grass

Reed canary grass is an aggressive competitor in certain wetland systems. Once established, it can alter the physical environment and further enhance its competitive abilities. MDC did a study to determine if the grass could be controlled by disking, cover crops (corn and winter wheat), and a combination of disking and herbicide. Preliminary results indicate that all treatments were effective in reducing the density and coverage of reed canary grass. Disking, combined with spraying, was the most effective control. We will evaluate the treatments further to assist managers in the best options for treating the grass.

## Study to improve understanding of horse enthusiasts' conservation-area use

People use conservation areas for a variety of recreational purposes, and horse riding is one of the more popular forms of recreation on these areas. We conducted a study to evaluate the desires, attitudes and behaviors of horse enthusiasts who use conservation areas, as well as other public lands. We used the results to provide information to managers locally about equestrian opinions, particularly relating to timber sales and trail construction. A joint statewide mail survey of horse-riding enthusiasts is being developed in cooperation with the Missouri Department of Natural Resources, National Parks Service, and the U.S. Forest Service. It will be mailed to Missouri horse owners and handed out to riders at major trail rides and to outfitters in the spring of 2008.

The study will be used as a basis for the development of a plan for equestrian use on public lands in the state. In addition, we have improved horse trails on several MDC areas throughout Missouri. The improvements have eliminated hazards to riders, provided for year 'round horse-trail riding and reduced some erosion resulting from heavy public use.

# Active management on MDC-owned and -managed lands

MDC has increased active management in the last few years on MDC lands-especially for quail and grassland birds. During FY07, MDC staff conducted habitat-management activities on approximately 150,000 acres of public land. Staff spent nearly 132,000 hours on area maintenance; a portion of this time was spent repairing vandalism to signs and structures.



### Listened to Missourians

The Department of Conservation believes that all Missouri citizens deserve respect, and that part of delivering excellent public service is to listen and understand what Missourians say about conservation programs and services. We conduct a variety of scientifically sound, unbiased and representative efforts each year in an effort to understand public opinions, expectations and recreation participation. This information guides decisions about regulations and fish, forest and wildlife management. In FY07 there were 63 activities that involved 310,306 people. These included public surveys, focus groups, public meetings and Protection Division contacts. In addition, MDC's ombudsman and the staff of Missouri Conservationist magazine answered dozens of questions daily from the public.

# Provided staff and equipment assistance in disaster relief/response situations

The MDC's promise to serve the public extends beyond our traditional goal to provide exceptional customer service. Equally important are our activities instrumental to the safety of our stakeholders and employees, and our responses to catastrophes within and outside our state borders. During FY07, we assisted in several disaster relief/response situations—the southwestern Missouri ice storm, several tornadoes and the Missouri River flood.

MDC's Type 3 IMT (Incident Management Team) received its first incident assignment ever during the winter of 2006-2007. The team managed more than 150 MDC resources that were responding to the major ice storm that hit southwestern Missouri in January. MDC resources

responded at the request of Missouri's State Emergency Management Agency (SEMA). They used heavy equipment and chainsaws to clear roads of downed, ice-covered trees and limbs. This activity was critical to allow access for emergency crews to restore power and assist stranded citizens. In the spring of 2007, a major flood in northwestern and central Missouri prompted mobilization of the IMT3 for a second time. The team was demobilized in two days when the flood did not develop to the large scale that was predicted due to an unexpected break in the prolonged rain.

# **Integrated Data Framework to improve** business management of information

Key management information for the agency has come to reside in various unrelated computer systems throughout the organization. This lack of a consolidated information hub, or "data warehouse," forces agency staff to spend considerable time gathering information in order to respond to management questions, public inquiries or legislative concerns.

Integrated Data Framework is an effort to consolidate and integrate, into a single electronic place, existing and new sources of information that will be used to make more informed management and policy decisions. During the year, we hired a contractor to help examine what information systems existed, what information was stored in those systems, what information employees required to effectively do their jobs, how best to integrate the information and to perform an analysis to map out where we want to go. The contractor completed the initial planning phase and recommended a seven-part project. This effort will allow managers to track where accomplishments actually took place on the landscape and the amount of time spent performing the various activities. It will provide the links back to current financial systems.

## Tracked strategic plan accomplishments

Fiscal year 2007 was the first year of tracking accomplishments of The Next Generation of Conservation, MDC's strategic plan approved by the Conservation Commission in March 2006. The plan identifies nine goals, 28 results we want to achieve and 61 specific actions that MDC will work with Missourians to achieve. For each of the action items, performance measures and staff responsible for reporting are identified. An automated, webbased data entry program has been developed to facilitate accomplishment tracking. Further devel-

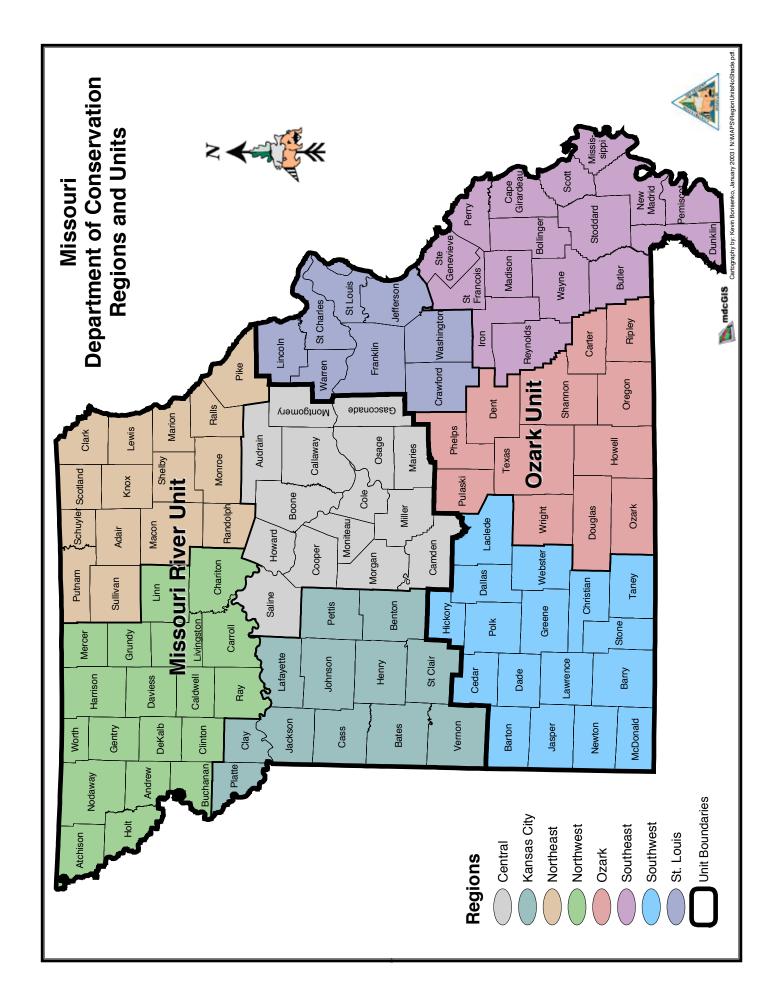
opment of the program will include the ability to generate reports showing annual and cumulative accomplishments. The Next Generation of Conservation is available online at www.missouriconservation.org/documents/about/nextgen.pdf

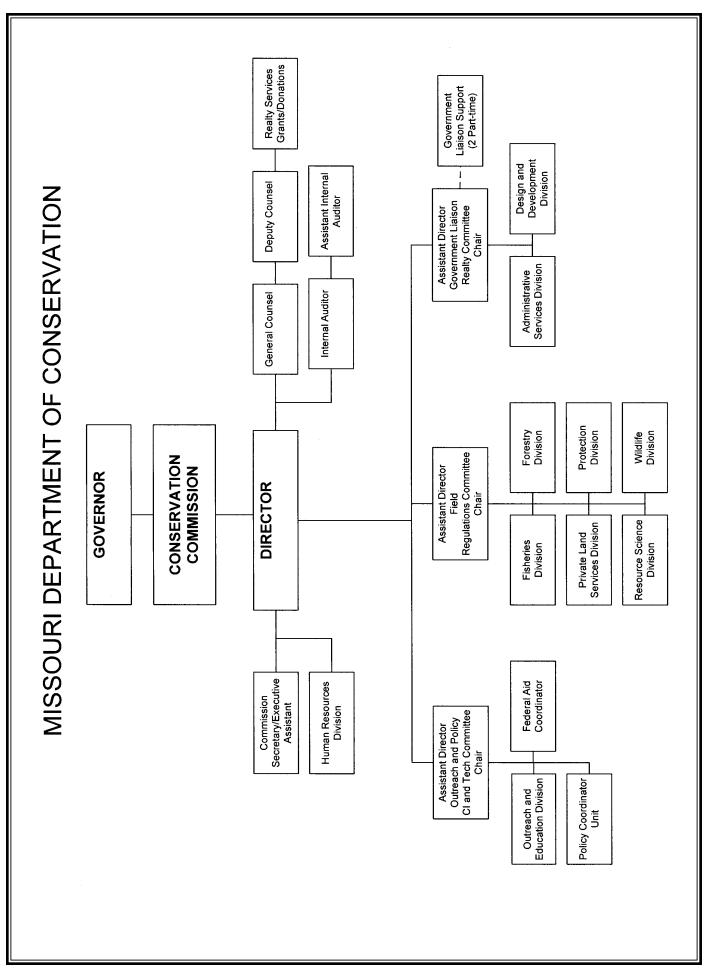
# Improved department business processes

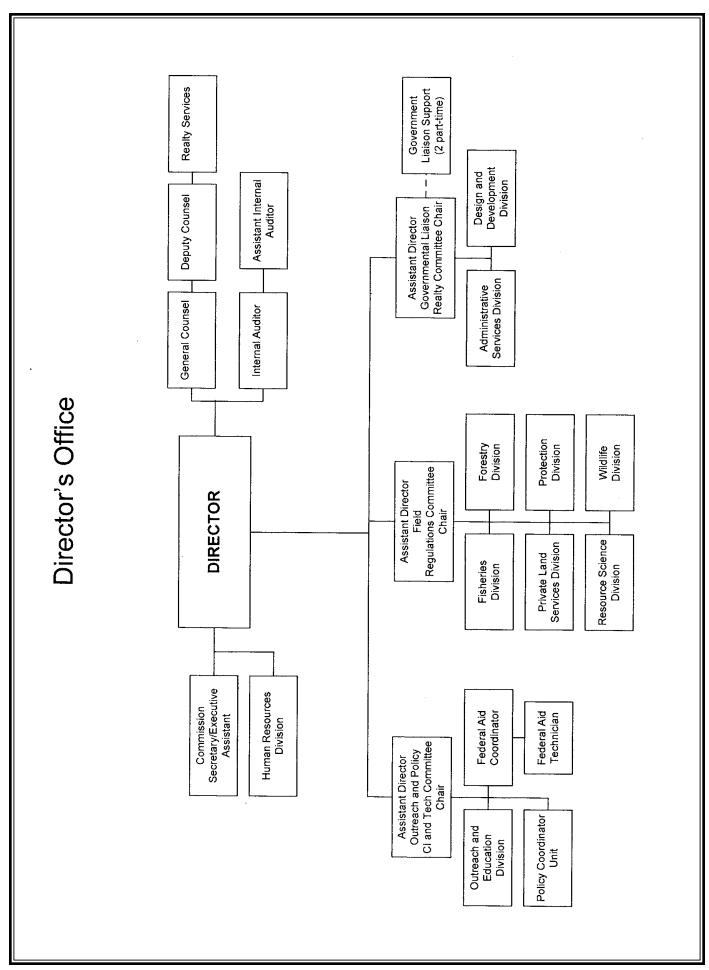
An MDC staff member participated on the Board of Examiners for the Missouri Quality Award and assisted Department staff to learn how the award criteria can help MDC improve its organizational effectiveness and increase overall performance.

# **Organization and Administrative Descriptions**

- ▲ Department Regions and Units
- ▲ Department Organizational Chart
- ▲ Director's Office and Department Divisions







# **Director's Office**

### John Hoskins, Director

Director John Hoskins, appointed by the Conservation Commission, is the administrative officer of the Department of Conservation and directly oversees the three assistant directors, general counsel, internal auditor and the Human Resources Division administrator.

### John Smith, Assistant Director

Assistant Director John Smith administers field operations for MDC and directly oversees division administrators of Fisheries, Wildlife, Forestry, Private Land Services, Protection and Resource Science. He is also chair of the Regulations Committee, a standing committee that recommends statewide wildlife regulations to the Conservation Commission.

### Denise Brown, Assistant Director

Assistant Director Denise Brown is the MDC liaison with the Missouri congressional delegation and federal agencies, and directly oversees the Outreach and Education Division and the Policy Coordination Unit.

### Bob Ziehmer, Assistant Director

Assistant Director Bob Ziehmer is the MDC liaison with the state legislature, state agencies in the executive branch and the governor's office staff. He directly oversees the Administrative Services Division, the Design and Development Division, and serves as chair of the Realty Committee. He also represents MDC on the Land Reclamation Commission.

## Tracy McGinnis, General Counsel

General Counsel Tracy McGinnis is legal adviser to MDC staff, the director and Conservation Commission.

## Nancy Dubbert, Internal Auditor

Internal Auditor Nancy Dubbert serves MDC by independently analyzing MDC operations, policies, procedures, records and compliance with laws and regulations to ensure effectiveness and accountability. The internal auditor also is custodian of records and oversees the assistant internal auditor.

### **Policy Coordination Unit**

The Policy Coordination Unit serves the director's office and the agency by managing agency-wide, statewide, complex or sensitive issues. The team of 10 staff is supervised by Jane Epperson. Examples of services include:

- Coordinating intra- and inter-state forest, fish and wildlife resources associated with the Missouri, Mississippi and White rivers.
- Coordinating additions or revisions to the Area and Resources Management Policy and Procedures Manual.
- Obtaining necessary state and federal environmental regulatory permits and cultural resources clearances for statewide MDC construction and land management activities.
- Representing public forest, fish and wildlife interests by coordinating and providing comments or recommendations to federal agencies authorized to conduct environmental reviews and approve project permits.
- Responding to public requests for site-specific information regarding species and communities of conservation concern by providing comments or recommendations to minimize impacts.

- Coordinating public involvement activities including social and economic survey analysis, public-use surveys and regional citizen forums.
- Guiding MDC's strategic planning process.

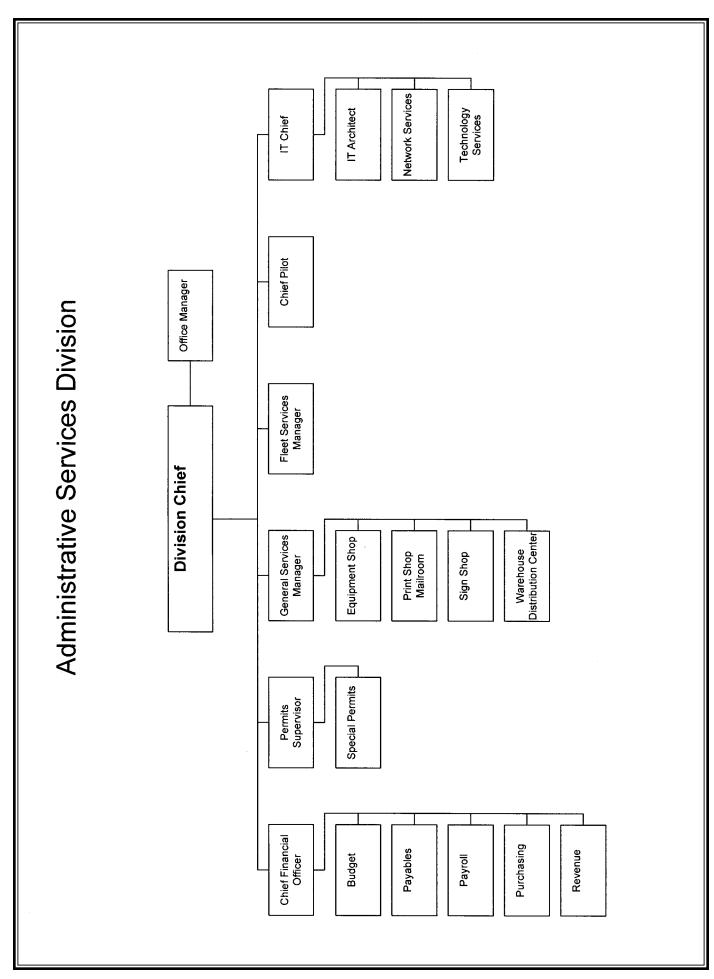
### **Realty Services**

We acquired approximately 1,134 acres of land in 17 counties; of those, nearly 440 acres were acquired by donation. Acquisitions included land providing habitat that supports the only population of spring cavefish in Missouri; land lying along the Little Niangua River, which supports one of the largest remaining populations of the Niangua darter; land that will allow for additional restoration of riparian zones; land consisting of bottomland forest and providing open backwater-swamp habitat; grassland providing prairiechicken nesting and brood-habitat-restoration opportunities; and a tract containing more than one mile of coldwater stream frontage falling under the Plan for Missouri Trout Fishing.

### Federal Aid

The federal aid staff is MDC's primary administrator of federal-aid granting opportunities. Some of the agencies in which federal-aid monies are obtained and managed include the U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency and Natural Resource Conservation Service. MDC's federal-aid staff administers approximately 85 federal grants, with the most significant of these being the Sport Fish and Wildlife Restoration grants.





# **Administrative Services Division**

**Mission:** To provide agency-wide support and expertise in a manner that ensures financial accountability, encourages wise use of MDC assets, promotes technology, and develops services to satisfy and meet MDC responsibilities and public expectations.

Administrative Services Division fulfills its mission by serving MDC's internal and external stakeholders through the following sections that comprise this division.

Financial Services – This section provides a broad range of financial functions that support MDC's operations, while carefully managing the agency's assets, which have been entrusted to its care. Revenue projections and management, internal and executive budget management, financial analytical support, agricultural crop management, accounts payable and MDC's payroll are the functions this unit oversees.

Permit Services - This section is responsible for the distribution and management of point-of-sale automated permits, managed hunt/special permits, and commercial and landowner permits.

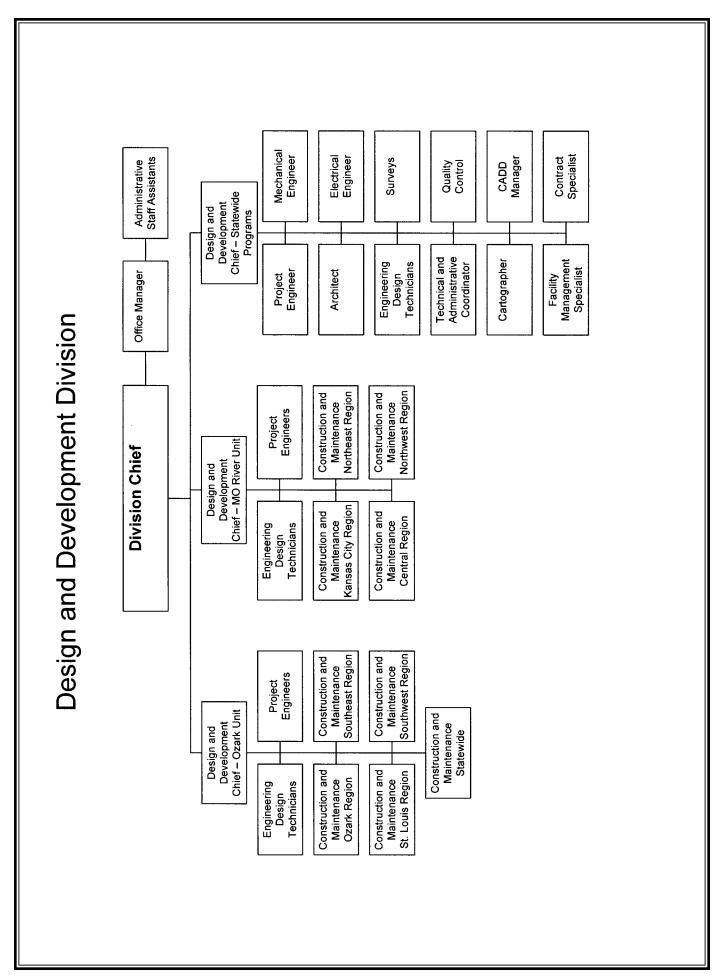
Fleet Services—The unit is responsible for ordering department vehicles and fixed-asset inventory. We seek ways to improve and minimize the traveling performed with state vehicles.

**Information Technology Services**—Communication responsibility for the entire agency is entrusted to this section. Better known as IT, employees provide a wide range of services which include data, telecommunications and radio system management, helpdesk operations, software support, network operations and application-development functions.

General Services - This section oversees equipment management and maintenance, sign production, distribution center operations, and printing and mailing functions.

Flight Services - This unit provides flight services for MDC resource functions such as wildlife management, fire control and enforcement. The unit also provides transportation for personnel; travel is more economical by air than by other modes of transportation. Flight Services is responsible for the upkeep and maintenance of MDC-owned aviation equipment.

Administrative Services Division makes every effort to achieve its mission by maintaining the financial integrity of MDC and ensuring prudent and frugal use of its assets. We provide a broad range of highquality support services to MDC's staff and programs. Not only do we lead and facilitate the effective use of technology in MDC operations, but we also acquire and maintain MDC equipment.



# **Design and Development Division**

*Mission:* To provide high-quality professional engineering, architectural, surveying and construction/maintenance services to assist MDC in carrying out its mission.

#### Goals:

- Support MDC by designing and constructing public-use facilities that are in harmony with the environment and enhance public use of our natural resources
- Provide sound conservation engineering assistance to other MDC divisions and private landowners
- Provide high-quality maintenance to MDC facilities and conservation areas
- Provide excellent and timely customer service to MDC

### Organization:

The division is organized into three units, with administrative and design staff located in the central office, and construction and maintenance staff located in each of the eight regions.

### **Programs:**

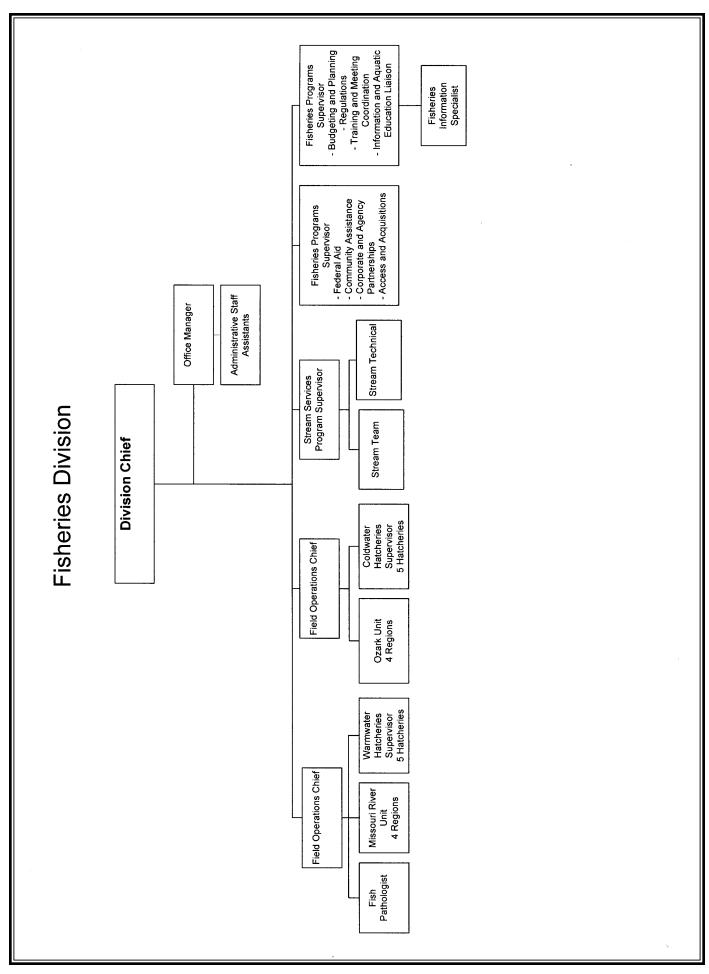
Engineering and Architecture—The division provides engineering and architectural designs to implement MDC's capital improvement/construction development (CI/CD) budget. Staff handles all aspects of design and development on projects which may include: performing investigations, conducting feasibility studies and/or environmental assessments; and preparing design drawings with associated contract specifications. Types of projects include boat accesses, docks, roads, parking areas, office and storage buildings, fish hatcheries, fishing lakes and ponds, nature centers, shooting ranges, trails and wetlands.

**Technical Support**—In addition to handling the CI/CD projects, engineering staff also provides support and design expertise on non-capital improvement projects to private landowners, public entities and other MDC divisions. Engineers are available to evaluate stream-erosion problems and provide advice/ recommendations/plans to private landowners through on-site visits. In addition, engineering staff is available to present educational seminars to local governmental agencies on the proper techniques for streambank stabilization. Staff also provides design drawings and estimated quantities on MDC's repair and renovation projects; these efforts support our regional construction and maintenance superintendents and field resource staff.

Surveys - Employees in this unit are responsible for engineering and construction surveys and land boundary surveying for property boundary delineation.

**Construction and Maintenance**—In each region, the division maintains superintendents, carpenters, equipment operators and facility maintenance technicians. This staff is responsible for the construction of those capital-improvement projects assigned to it, as well as small construction projects, and repair and renovation projects needed by other MDC divisions. They not only provide facility maintenance to the nature centers and regional offices, but also perform routine maintenance at unstaffed department areas. At these they mow grass, grade parking areas and entry roads, clean boat ramps and perform minor maintenance on privies, docks and pavilions.

County Aid Road Trust (CART) – The division administers the department's CART Program which involves cost sharing of roadway maintenance with counties and other governmental subdivisions to help ensure that roads accessing department areas are properly maintained and provide adequate access.



# **Fisheries Division**

**Mission:** To professionally manage the fish and associated aquatic plants and animals of Missouri for the use and enjoyment of the people.

Goals: The nine goals of The Next Generation of Conservation guide the division. Our objectives are to maintain aquatic biodiversity, reduce the effects of aquatic nuisance species, provide enjoyable fishing trips, protect aquatic habitat, and inform and educate the public about Missouri's aquatic resources.

Missouri's aquatic resources are vast and diverse. Missouri has almost 17,000 miles of permanent rivers and streams and another 39,000 miles of intermittent streams. The state also has about 780,000 acres of lakes (36 percent public). Each year, millions of people use and enjoy our waters, and fishing continues to be one of our most popular outdoor activities. About 22 percent of our residents aged 16 and older fish sometime during the year. During 2006, MDC sold 1,352,789 fishing permits and tags of all types to 833,543 people. Fishing is big business and very important to the state's tourism industry.

Organization: To carry out its mission and achieve its goals, the division has fisheries management staff deployed in MDC's eight regions. Management efforts are supported by five warmwater fish hatcheries, five cold-water fish hatcheries, the Stream Unit and central office staff.

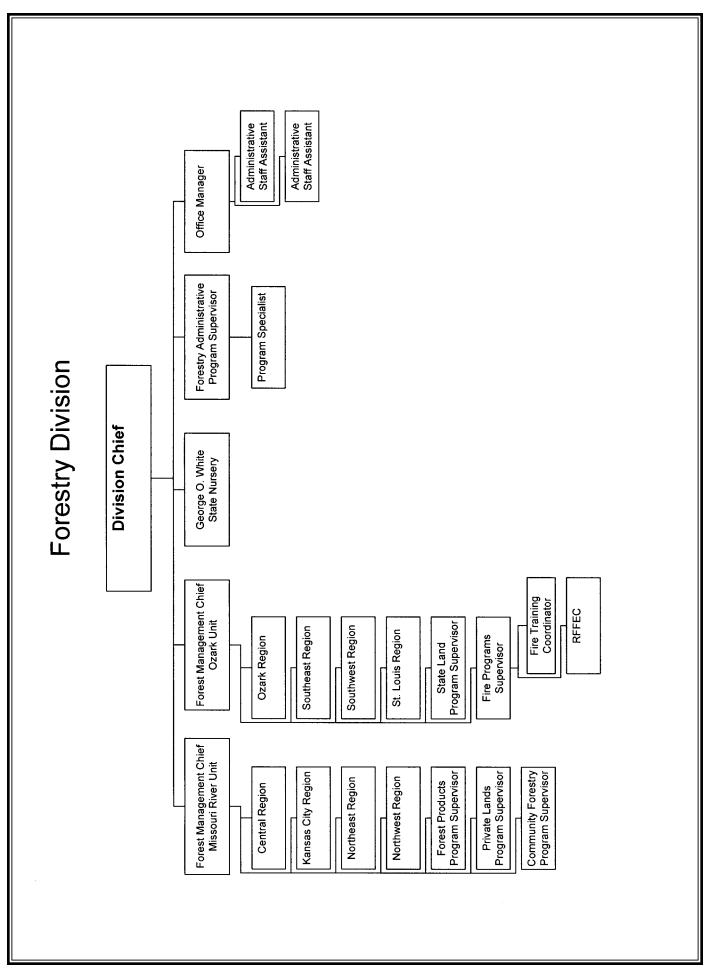
### **Programs:**

Regional staff is responsible for monitoring and maintaining the quality of the aquatic resources, managing the public fisheries resources, providing technical guidance in lake and stream management to private landowners and other state and federal agencies, providing and assisting with public information and education, and representing the division and MDC on matters pertaining to the aquatic resources of their region.

The staffs of the five warmwater hatcheries are responsible for rearing the fish needed to stock public waters, waters used for special fishing events and aquatic resource education, and private lakes that qualify for initial stocking of fingerling fish. They also play a vital role in our efforts to restore state and federal endangered species. The five coldwater hatcheries rear the trout needed to stock public waters. Their staffs are also responsible for stocking and managing the four trout parks that are enjoyed by more than 400,000 anglers each year.

The Streams Unit is responsible for administering two programs—the Stream Team, which consists of 67,000 citizen volunteers, and Stash Your Trash. It works with the Missouri Department of Natural Resources on the Volunteer Water Quality Monitoring program and provides stream technical services to MDC staff, other state and federal agencies and private landowners.

Central office staff directs and administers division programs, works on the acquisition and development of public fishing and boat access areas, coordinates angler recognition programs, develops and revises technical and popular written materials and provides administrative support for division and MDC staff and programs.



# **Forestry Division**

*Mission:* To protect and manage the forests of the state for long-term resource health and sustainability, and for the use and enjoyment of Missouri's citizens.

#### Goals:

- Forest management decisions and actions are scientifically based, in concert with MDC goals, and aimed at developing healthy and sustainable forest ecosystems.
- Private land and community forest resource management is an emphasis for Forestry Division. It focuses on landowner education and the development of partnerships with other agencies, organizations and industry.
- Forestry Division public land management activities maintain the long-term integrity of forest ecosystems, while contributing to societal and economic goals and needs.

Organization: To fulfill its mission, the division is organized into seven main program areas as described below. Administrative staff members are assigned to specific program areas, while field staffers work across all program areas.

### **Programs:**

Private Land - Foresters assist Missouri landowners with forest management through one-on-one contacts and by using the Forest Crop Land program (state forestry law), Tree Farm program, Agroforestry, Forest Stewardship, Forest Legacy and many other state and federal cost-share programs. We assist more than 2,000 landowners with management on 30,000-plus acres annually.

Public Land - The division manages in excess of 440,000 acres of public forest land. Foresters also provide technical assistance on lands managed by the Wildlife Division. We annually complete more than 45,000 acres of active management. This includes forest inventory, tree planting, timber sales, forest stand improvement, wildlife management practices, and glade and savanna management.

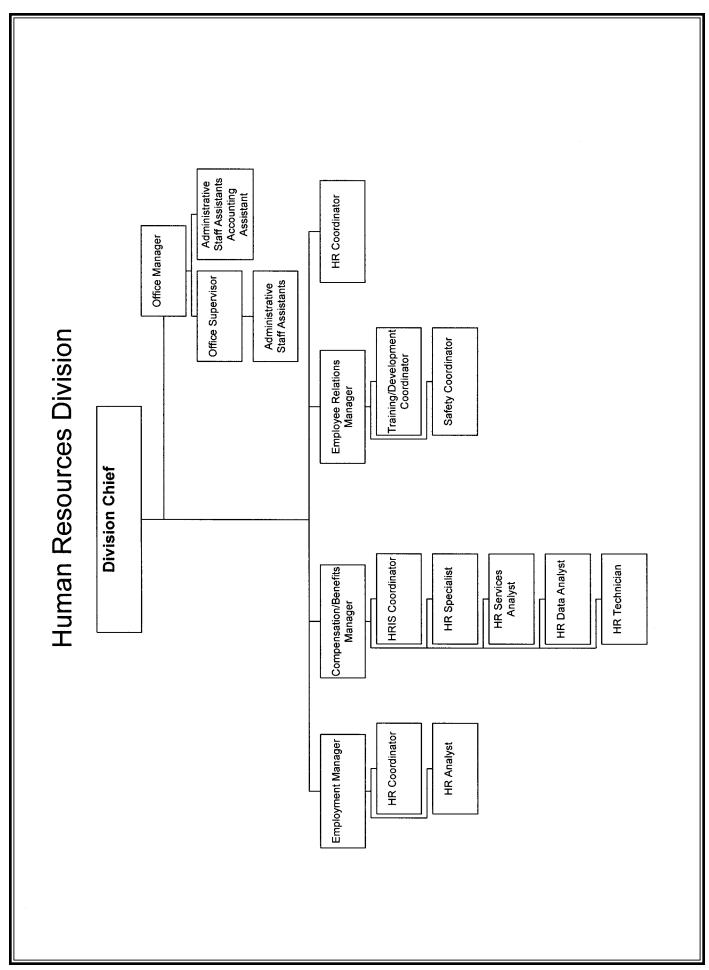
Fire—We have statutory responsibility for wildfire suppression in the state. Division personnel work closely with more than 800 fire departments to offer training, provide federal excess property, provide grants for the purchase of fire equipment and promote wildfire prevention activities.

**Urban and Community Forestry**—This program provides planning and technical assistance to communities and homeowners. In addition, the Tree Resource Improvement and Maintenance (TRIM) program provides more than \$250,000 of cost-share assistance each year to more than 40 Missouri communities for tree planting and maintenance of their urban forest resources. We have a partnership with the National Arbor Day Foundation to promote and administer the Tree City USA program. Missouri has 70 certified Tree City USA communities. We also work with the Arbor Day Foundation to provide training to electric utility right-of-way clearing crews through the Tree Line USA program. Ten utility providers are Tree Line USA certified.

Forest Products - The division works closely with Missouri's forest products industry to monitor the use of our state's forest resource. The Missouri Forest Products Association and Forestry Division jointly sponsor logger training courses aimed at educating loggers about forest management principles, introducing new techniques and concepts, and enhancing the safety of timber-harvesting operations. To date, more than 250 loggers have been through the program in Missouri.

Outreach and Education - Forestry Division works closely with our Outreach and Education Division to increase Missourians' understanding about their state's forest resources and proper forest management activities. In addition, foresters conduct programs, field days and workshops for schools, special interest groups and the general public on a wide range of forest management issues.

State Forest Nursery – The nursery annually grows and distributes approximately 5 million seedlings of more than 50 species. The seedlings include trees and shrubs suitable for reforestation and wildlife habitat restoration activities. The seedlings are planted on both public and private land throughout the state.



# **Human Resources Division**

Mission: To sustain the human resources services and programs that are necessary for a diversified, dynamic workforce and for an organization considered an "employer of choice."

#### Goals:

- Assist MDC in hiring and retaining a highly trained and diverse workforce
- Advance practices that encourage employee empowerment and recognize job accomplishments
- Ensure ongoing employee training and development programs are predicated on important job competencies and offered in the most efficient and cost-effective manner
- Reinforce safety-conscious attitudes and practices in all aspects of employee work

### **Programs:**

**Compensation**—Staff performs compensation and classification activities that are used to support an employee compensation program which is both competitive and fiscally responsible. Staff also administers significant employee benefits programs such as a comprehensive medical and life insurance program.

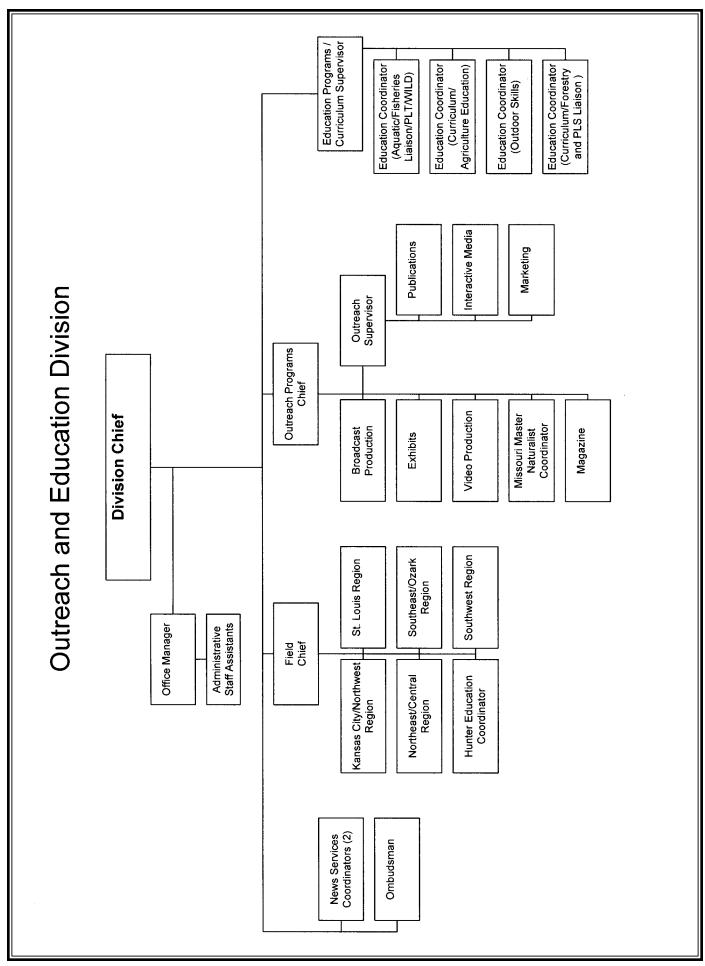
Employee Relations – Staff coordinates activities promoting employee relations such as programs that recognize years of service, special achievement and retirement, and administers employee health and wellness programs that include health screenings and health education. Staff also assists employees and supervisors during grievance and corrective action processes to ensure that objective, fair and appropriate actions occur.

**Policy Administration**—Staff maintains MDC's Human Resources Policy Manual by developing new or revised employment-related policies that help supervisors guide employees uniformly and fairly. Staff also tracks state and federal laws, executive orders, and regulations that address human resources management issues, and works to ensure MDC is in compliance.

**Recruitment and Selection**—Staff uses a variety of recruitment methods to attract qualified applicants for job vacancies and assists supervisors with all activities during the evaluation and recommendation processes. In addition, staff monitors MDC's affirmative action effort to ensure equal employment opportunities.

Training and Development – Staff administers MDC's employee development and leadership training programs that includes the Academy for Leadership Excellence. The academy provides competencybased training for all employees, which is based on specifically identified knowledge, skills, behaviors and attitudes MDC considers important to success.

Safety – Staff administers loss-control programs including safety training, hazard identification on public lands, chemical safety, and personal injury, vehicle accident and public mishap reporting and monitoring.



# **Outreach and Education Division**

*Mission:* To help Missourians connect with nature and conserve it, too.

### Goals:

- Teach Missourians how to sustain healthy plant and animal communities.
- Provide Missourians of all ages with skills and knowledge to enjoy the outdoors.
- Show the many benefits people get from conserving our fish, forests and wildlife.
- Teach the importance of science and ethical behavior in balancing how we live with our fish, forests and wildlife.
- Help Missourians understand these key concepts of conservation:
  - a. A healthy environment needs a diverse mix of plants and animals.
  - b. Forests, grasslands, rivers and wetlands are always changing—with or without us. To live in balance with the natural world, we must understand how it works and work with it.
  - c. It's natural for what's on the ground to flow downhill into streams and ponds. To protect the health of our waters and the life that depends on them, we must be mindful of what we put on the land and how we change it.
  - d. Hunting, fishing, trapping and harvesting wood are part of our heritage, provide us with valuable resources and, perhaps most important, are tools that can be used to improve and maintain the health of our fish, forests and wildlife long into the future.

### **Programs:**

Conservation Nature Centers and Visitor Centers—These are located in Jefferson City, Kirkwood, Blue Springs, Springfield, Cape Girardeau, Glencoe, Branson, St. Charles, St. Louis and St. Joseph. Exhibits and naturalist-led programs, as well as walking trails, offer more than 1 million visitors each year a variety of opportunities to learn about and enjoy Missouri's nature. Although it is also an MDC facility focused on education, the Discovery Center in Kansas City uses a slightly different approach to reaching youth in an urban area. Six thematic classrooms provide students with a broad range of hands-on learning about conservation concepts and sustainable resources.

Shooting Range and Outdoor Education Centers—Five staffed shooting ranges provide safe, inviting places for hunters and others to practice shooting rifles, shotguns, handguns and archery equipment. In addition, a variety of conservation-related classes are offered to the public. These include woodworking for wildlife, orienteering, youth hunting and more. More than 150,000 people attend programs and use these facilities each year. In addition, more than 70 unstaffed ranges (including both firearms and archery ranges) serve Missourians throughout the state. In some cases, local cooperative agreements provide management of the facilities.

Teacher/Youth Leader Training-Conservation education consultants, outdoor skills specialists and education coordinators work with teachers and youth groups throughout the state. Teachers receive free conservation education materials and learn to incorporate conservation concepts and outdoor skills into their curriculum.

Hunter Education - Since 1988, hunter education training has been mandatory for all hunters born on or after Jan. 1, 1967. Our staff works with the conservation agents to coordinate volunteer hunter educators, who provide about 1,000 classes each year. These result in hunter certification of about 29,000 people annually.

Grants to Schools – In recent years, about \$200,000 in grants has been provided to schools to develop outdoor classrooms, pay for teacher resources and for busing costs for conservation field trips. As part of the new "Learning Outdoors School" program, conservation grants to schools will continue to expand in future years. Grants for field trips, outdoor learning areas, instructional kits and outdoor skills equipment will complement the use of new learning units in the classroom.

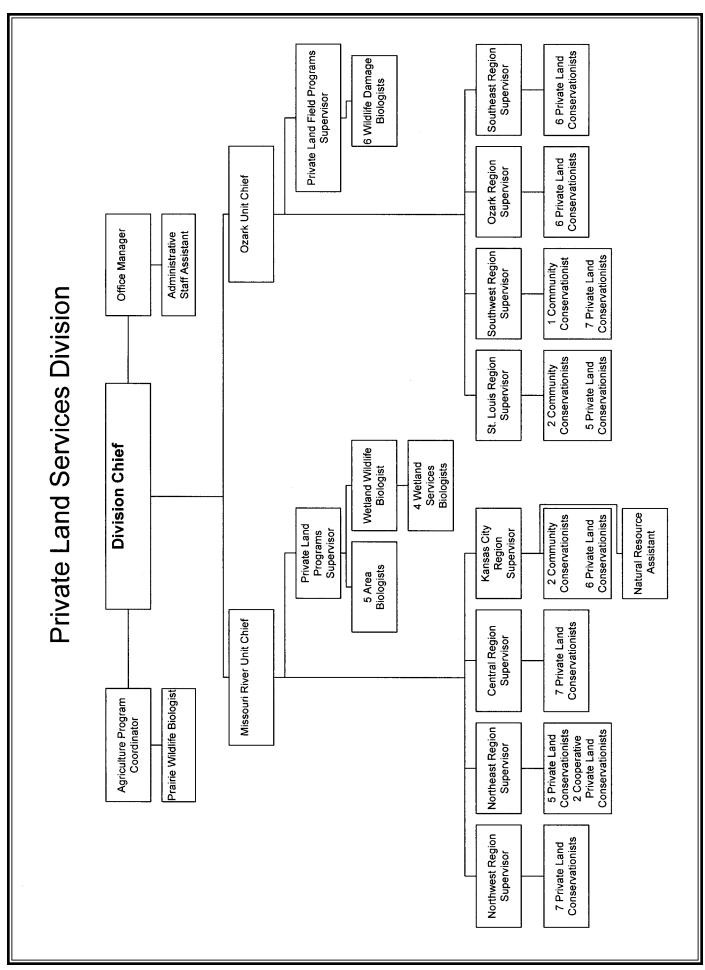
Outdoor Skills Events (youth fishing/hunting clinics, Missouri Outdoor Women, Missouri Outdoor Families and partnership events such as 4-H Shooting Sports, etc.) – Each year we present special public events to give thousands of Missourians of all ages a chance to learn hands-on skills so they can enjoy our great outdoors for years to come. In order to reach Missouri schools more effectively and consistently, Outdoor Skills specialists offer programs which focus on five outdoor skills areas: fishing; archery; firearm sports; map, compass and GPS; and a general area which addresses basic principles of safe outdoor experiences.

Missouri Conservationist magazine – Provides 25 percent of Missouri households with conservation information at their doorsteps 12 times a year. The magazine is mailed to almost 500,000 readers each month, as well as to Missouri schools. Each issue is also available on our Web site.

Web, News, Publications, Video and Audio Productions – It takes many kinds of media to provide information on conservation and all its related opportunities. We serve up millions of web pages each year, produce free publications and for-sale books, weekly news releases, loan the public dozens of videos/DVDs and provide local television stations with conservation-related footage. The information covers topics as diverse as bird identification, hunting and fishing regulations, and how to create wildlife habitat in an agricultural landscape. The information flows in as well as out; an ombudsman finds the answers to citizens' questions and helps to investigate concerns and resolve complaints.

Citizen Involvement/Awareness Programs (Grow Native, Missouri Master Naturalist, No More **Trash)** – In the past few years, several new programs to help Missourians promote conservation at a statewide and grassroots level have gotten underway. Three partners work with MDC to sponsor these (Missouri Department of Agriculture, University of Missouri Extension, and Missouri Department of Transportation, respectively).





# **Private Land Services Division**

*Mission:* Help landowners meet their land management objectives in ways that enhance fish, forest and wildlife conservation.

**Organization:** With 93 percent of Missouri in private ownership, the health of our natural resources will be determined by private landowners. In recognition of the need to provide enhanced support to traditional agricultural producers, as well as growing numbers of people who own land for recreation, Private Land Services Division was established in 1999. The division contains fish, forest, wildlife and agriculture professionals who provide conservation assistance to private landowners in Missouri.

### Goals:

- To provide timely technical advice to private landowners who request assistance.
- To help private landowners locate financial assistance that could defray resource treatment costs.
- To build partnerships with other agencies and the private sector that support private landowner efforts to achieve conservation.
- To improve awareness of conservation issues/challenges, as well as methods of improvement.

### **Programs:**

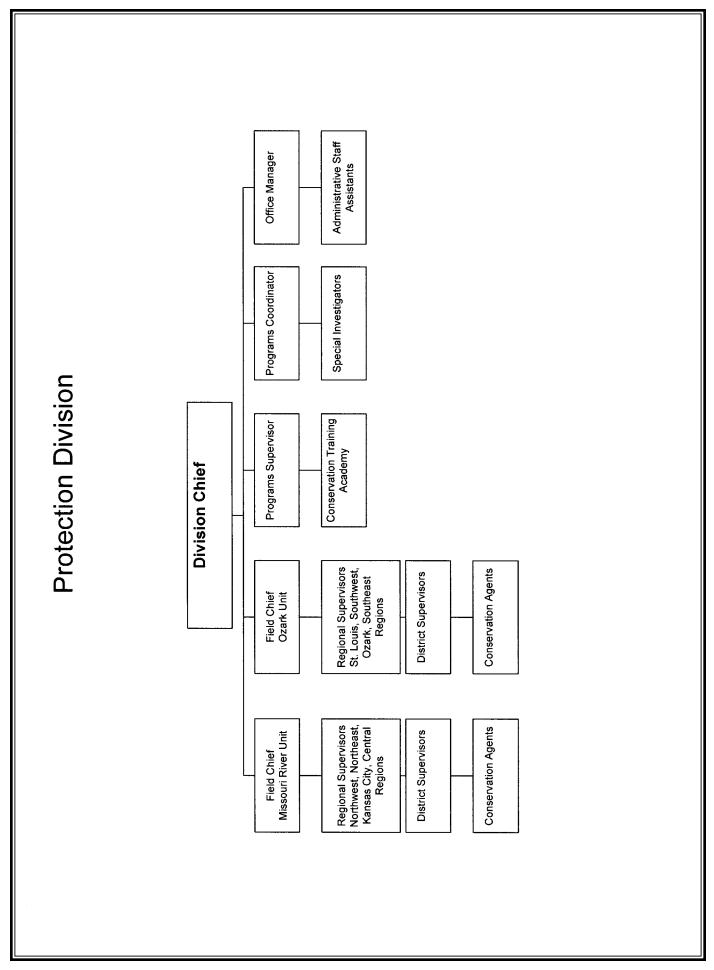
**Technical Support**-Private Land conservationists are available to evaluate resource needs and provide advice/recommendations to private landowners through in-office or on-ground visits, as well as workshops, field days and other initiatives. Most of these positions are co-located in USDA service centers to make contact easy for private landowners in local communities throughout the state.

Financial Assistance – MDC has established effective working partnerships with the Natural Resources Conservation Service and Farm Service Agency to integrate fish, forest and wildlife considerations into implementation of Farm Bill programs that include Conservation Reserve program, Wetland Reserve program, Environmental Quality Incentives program, Grassland Reserve program, Conservation Security program and Wildlife Habitat Incentives program. MDC is also in partnership with non-governmental organizations such as Ducks Unlimited, Quail Unlimited, the National Wild Turkey Federation, Missouri Prairie Foundation, Quail Forever and Pheasants Forever to develop cost-share and other initiatives through matching arrangements.

Wildlife Damage Assistance - Wildlife damage-control biologists provide expert and specialized technical assistance to private landowners who experience problems with wildlife including beaver, covote, otter, Canada geese, deer and other species.

Agriculture Liaison - Liaison efforts with agriculture agencies and groups are offered to foster communication and understanding of fish, forest and wildlife issues as relates to agriculture. These efforts are very important since 65 percent of the land area of Missouri is included in farms.

Community Conservation Program - Community conservationists in Kansas City, St. Louis and Springfield/Branson/Joplin areas are available to deliver natural resource technical services at the municipal, county and regional level. Their job focus is to work with communities, urban planners and developers to make informed land-use decisions that enhance the conservation of Missouri's forest, fish and wildlife resources.



# **Protection Division**

**Mission:** To protect and conserve Missouri fish, forest and wildlife resources and to serve citizens through a coordinated program of resource law enforcement, education, information and one-on-one contacts.

### **Programs:**

Conservation Agents - Agents carry out a variety of programs for MDC within their county assignments. Major job components are resource law enforcement activities; hunter education; local media liaison duties (many with regular radio/TV programs and newspaper articles); educational and informational presentations to adult and youth groups; wildlife surveys; response to fish kills, wildlife nuisance and damage complaints; and basic fish, forest and wildlife management advice and services to private landowners. Conservation agents are the official MDC representatives in their local assignments.

Wildlife law enforcement efforts to maintain compliance with the Wildlife Code, and enforcement of other state laws for the safe public use of MDC-owned lands, represent a major portion of Protection Division's workload. Conservation agents contacted 221,000 hunters and anglers in FY07 to ensure compliance and to provide regulation information. During these contacts, agents noted 31,100 violations; issued 4,500 written warnings; and made 8,900 arrests. This depicts a 95 percent conviction rate, which indicates high-quality work and excellent public support by agents in the area of resource law enforcement.

Training - Because of the nature of their work, conservation agents must have specialized training and a broad working knowledge of all MDC programs and areas of MDC responsibilities. New agents are required to have a bachelor of science degree in forestry, fisheries management, wildlife management, wildlife conservation, natural resources conservation law enforcement, criminal justice, agriculture, education with an emphasis in science or biology, or other related sciences, and must also successfully complete 26 weeks of intensive training before assignment to a district. After completion of training, the Missouri Department of Public Safety issues a peace-officer standards and training license (POST) attesting that the agent has completed 1,000 hours of POST-licensed law-enforcement training. In-service training is provided annually in accordance with changing resource conditions and law-enforcement standards. All licensed peace officers and reserve officers must successfully complete a minimum of 48 hours every three years of continuing education to maintain their peace officer licenses.

Operation Game Thief - Operation Game Thief provides a way for citizens to anonymously report poaching incidents with the opportunity for a monetary reward. In FY07, OGT produced 290 convictions from 742 telephone calls, which resulted in \$12,025 in reward money being paid to informants. The new Operation Game Thief traveling exhibit was used 120 days throughout Missouri this past year.

**Revocations** – Interstate Wildlife Violator Compact-Missouri is a participating state in the Interstate Wildlife Violator Compact. The compact is a legal organization of the wildlife agencies of 26 member states that agree to reciprocally honor revocations/suspensions of hunting, fishing and trapping privileges for wildlife-related violations. During the last fiscal year, 845 people from other states had their privileges revoked in Missouri through provisions of the Interstate Wildlife Violator Compact; an additional 137 were revoked for cause by the Conservation Commission in Missouri and submitted to the IWVC. Participation in the compact also benefits Missourians who travel to other compact member states for hunting and fishing activities. If found in violation, they may be given the opportunity to resolve the citation by mail rather than being required to post a bond before leaving the member state. They are subject to revocation by all compact states if the citation is ignored.

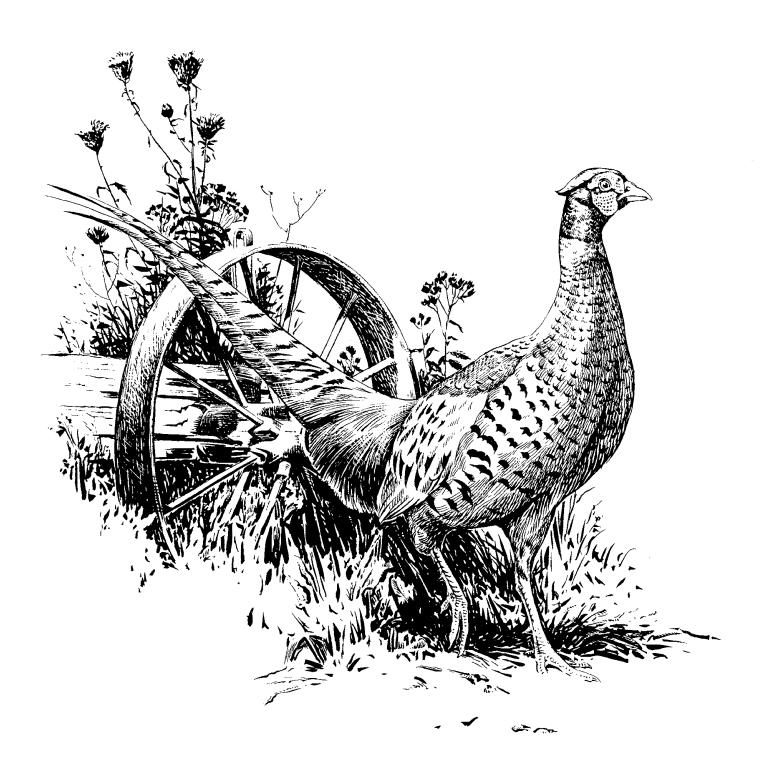
Missouri Seed Program - The Missouri Seed program provides habitat-planning information and foodplot seed to Missouri landowners. The goals of the program are to improve the quality of wildlife habitat on private lands and promote better farmer and landowner relations with MDC. Conservation agents distributed 135,000 pounds of seed to 3,500 landowners. The program is an avenue through which to contact private landowners regarding wildlife management programs, as well as other programs which MDC offers. Protection and Private Land Services divisions share in the administration of the program.

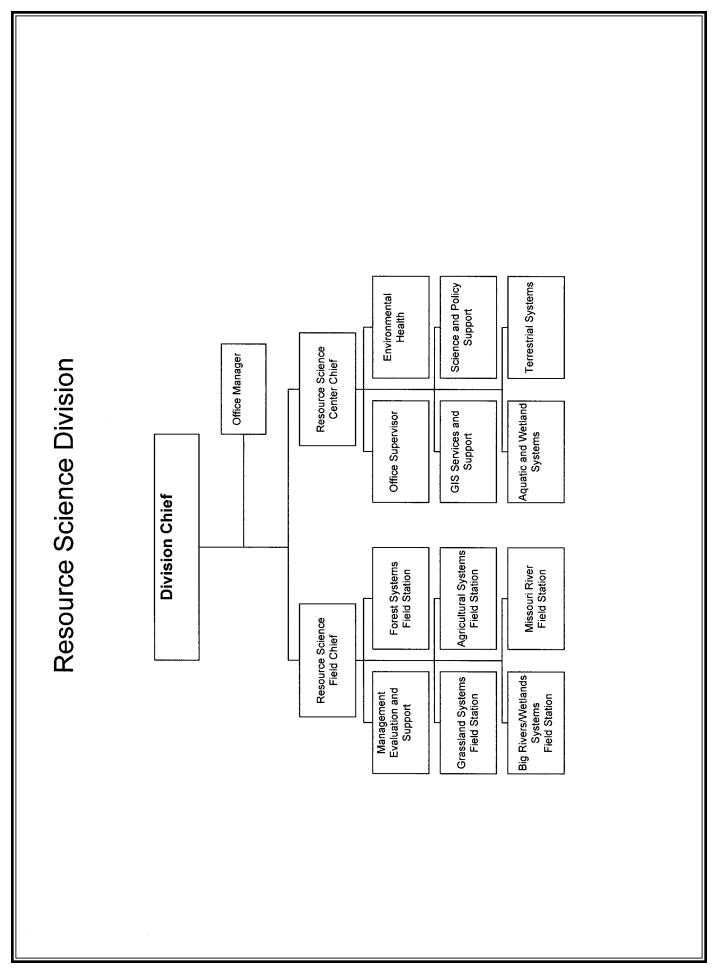
Hunter Education – Hunter education certification is required for purchasing any type of Missouri firearm hunting permit for people born on or after Jan. 1, 1967 (except the youth deer and turkey hunting permit). Conservation agents work with Outreach and Education division personnel and approximately 2,000 volunteer instructors to coordinate hunter education courses in all 114 Missouri counties. Protection Division personnel are also heavily involved in investigating every hunting incident in the state.

**Hunting Method Exemption Program**—The Hunting Method Exemption program provides special exemptions to physically disabled people by allowing them to hunt and take wildlife by methods not otherwise legally permitted. During last fiscal year 2,966 hunter method exemptions were approved for Missouri citizens.

**Group Fishing Permit Exemptions** – Protection Division administers permit exemption authorizations to supervised groups involved in rehabilitation programs or groups of hospital patients or people with disabilities under therapy. During this past fiscal year, 221 group fishing permits were issued for outings, providing fishing experiences to people who otherwise may not be able to participate in outdoor fishing activities.

Share the Harvest-Conservation agents and the Conservation Federation of Missouri coordinate the Share the Harvest program, in which hunters may donate deer meat to those in need through established charitable organizations. During FY07, approximately 6,584 hunters donated 322,500 pounds of venison to needy Missourians. Since the inception of the program, more than 709 tons of deer meat has been donated to Missouri citizens. Hunters donating venison to the program pay for the processing and tell the processor how many pounds of meat they want to donate. Hunters who wish to donate their entire deer may receive a \$35 reduction in the price of processing, which is paid to the processor by the Missouri Conservation Federation. In some cases, local organizations provide additional funds for processing so there is no cost to hunters who wish to donate deer.





## **Resource Science Division**

**Mission:** Provide the science-based information needed to conserve, appreciate and effectively manage the living resources of Missouri.

**Goals:** Natural resource management is based on sound biological, geographical and sociological information. An objective to establish a nationally recognized, science-based model for conservation will be accomplished by 1) ensuring ongoing development of a comprehensive and integrated understanding of Missouri's living resources and their values to society, 2) using accumulated knowledge to inform and recommend conservation actions, 3) evaluating the biological and social impacts of conservation actions and 4) reporting emerging knowledge of Missouri's living resources.

An integrated focus in Resource Science Division is organized around six systems and functions rather than traditional disciplines, and is dedicated to delivery of management assistance through five field stations; this approach was the basis for the following organizational units within the division (see organizational chart):

**Terrestrial Systems** staff strives to understand plant- and animal-habitat relationships, monitor population status and develop harvest- and species-management recommendations. Staff is regularly involved with specialized projects to monitor wildlife, plant diversity, population changes and forest silviculture.

Aquatic and Wetland Systems scientists conduct research and surveys that center on issues involving fisheries management, wetland and waterfowl management, fish communities, watersheds, stream-riparian-floodplain systems, reservoirs, in-stream flow and interactions among predators and prey and species of concern. Harvest management recommendations for statewide fish populations, waterfowl and other migratory birds are developed by this group.

Science and Policy Support staff works to link and improve access to databases which document Missouri's rich biodiversity through a web-based archival and retrieval system. Post-season harvest hunter and angler surveys, attitude surveys and public-use surveys are conducted to better understand the opinions and attitudes of Missourians and to ensure that human dimensions information is integrated with biological information to inform management decisions. Natural resource economics data is collected in conjunction with the public use and attitude information. Biometricians ensure statistically sound study designs and the use of appropriate statistical techniques to analyze and interpret complex natural resources questions.

**Geographic Information Systems (GIS)** will continue to play an ever-increasing role in natural resources management, planning and evaluation. The goal of the GIS program is to fully use geospatial technology and products to support natural resource decisions, archive the processes and evaluate the results. The GIS program supports more than 300 ArcInfo and ArcView users. Monthly training courses are conducted to help train new ArcView users and improve the skills of existing users.

The **Environmental Health** unit primarily provides the services that ensure monitoring and protection of Missouri's forest, fish and wildlife resources. Primary functions include protecting aquatic biodiversity such as mussel conservation and genetics research, water quality, forest health, and providing responsive service to agency staff, the public and other agencies and entities. Staff coordinates pollution and fish kill investigations with the Department of Natural Resources, and monitors contaminants in fish with the Department of Health.

The **Management Evaluation and Support** group provides the specific focus on research and monitoring to support field staff. This involves coordinating, designing and conducting surveys, monitoring efforts and applied research aimed at understanding the impacts of management actions on Missouri's resources. Scientists who work on crayfish, quail, karst and botanical surveys provide liaison support to local managers and facilitate the transfer of information within and across regions. Our division manages Missouri's Natural Heritage program, which tracks the status and occurrence of 1,116 species of conser-

vation concern and natural communities, and ensures that they are carefully documented, mapped and updated. In addition, our division supports the Missouri Fish and Wildlife Information System (MoFWIS), a searchable database of habitat, management and distribution data on more than 700 species.

The Field Unit of Resource Science Division is leading regional management evaluations by developing protocols and study designs with the goal of "learning by doing." Field stations, actively integrated with the division's centralized functions, focus on improving understanding of ecological systems, functions and processes by working with regional staff throughout the state.

- 1) The Grasslands Systems Field Station in Clinton focuses on ecological processes and management implications for cool- and warm-season grass pastures and hay lands, native prairie, savannas and glades and grassland-associated fish, invertebrate, wildlife species of conservation concern and all streams and impoundments fed by grassland watersheds.
- 2) The Forest Systems Field Station in West Plains focuses on ecological processes and management implications for upland forests, glades, savannas, springs, karst, fens and cold- and warm-water streams and impoundments drained by forested watersheds and management of forest-associated fish, invertebrate and wildlife species of conservation concern.
- 3) The Big Rivers and Wetlands Systems Field Station in Jackson and Puxico focuses on Missouri's large rivers and associated floodplains to understand landscape-level ecological processes. Staff develops tools and strategies to improve channel and floodplain habitats, bottomland forests and wetlands for fish, invertebrate and wildlife communities including species of concern.
- 4) The Agricultural Systems Field Station in Kirksville emphasizes annually cropped lands that produce cereal grains, oil crops, crops for human consumption and annually planted livestock forages. Also included in the field station's focus are retired crop lands including CRP plantings, cool-season grass pastures and old fields, concentrated livestock operations and streams and impoundments drained by agricultural watersheds and management for agricultural-associated fish, invertebrate and wildlife species of conservation concern.
- 5) The Missouri River Field Station in Chillicothe focuses on issues directly related to management of the Missouri River. Many aspects of large-river ecology will be addressed by the Big Rivers and Wetlands Field Station, including some important to the Missouri River. However, several active restoration and recovery programs are being conducted along the Missouri River, and this field station will bring a focused and coordinated monitoring approach among agencies to help clarify the success of these activities.

#### Programs:

Population management—Manage for, and when feasible, restore viable populations of plants, fish and wildlife compatible with the ecological capability of the land and balanced with the desires of resource users and the public.

Resource Science Division identifies priority population management challenges and develops recommendations, in collaboration with resource divisions, to manage harvested species, species of concern and invasive species.

**Ecological processes** – Increase our understanding of the processes that determine habitat conditions for native and introduced animals and plants.

Erosion and deposition through water, wind and fire are the natural disturbance and renewal processes that are essential to maintaining healthy systems and functions. The division focuses investigations on how to effectively re-establish or mimic these processes in Missouri's contemporary landscape to ensure restoration and management of plant and animal communities.

Management evaluation - Ensure that results of management and policy actions are measured and appropriately linked to resource-related outcomes, budgets and staff time.

Ongoing evaluation of resource responses and resource uses are essential to determine whether goals are met and to understand when change is needed. Resource Science Division promotes "learning by doing" to improve resource management programs and to ensure accountability of staff and budget resources.

Human dimensions – Provide and promote the use of human dimensions information in the management decision process.

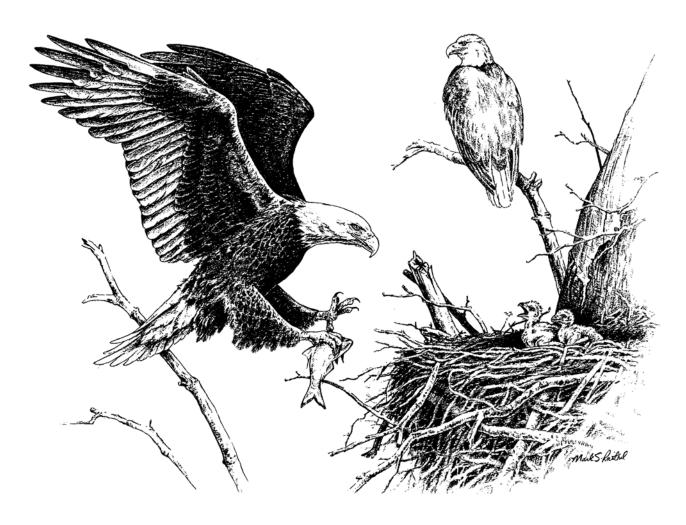
Resource Science Division collaborates with other divisions to ensure that human dimensions information is acquired and used in policy and management decisions. This information is used to track changing public expectations, anticipate demographic trends, and ultimately provide the information needed to make resource policy and management judgments.

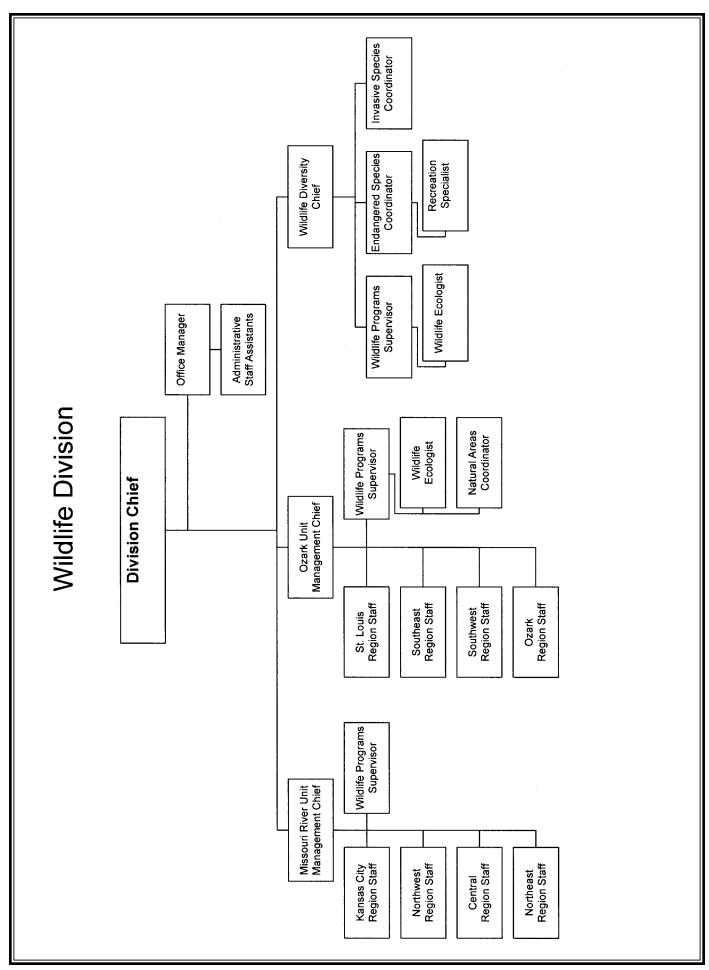
Large-scale planning - Ensure that all planning and program efforts are based on sound science and include evaluation measures.

Advances in Geographic Information Systems and associated ecological and geospatial applications (e.g., Ecological Classification Systems) are used to inventory, assess and monitor resource condition and management results at national, state, regional and area scales.

Information transfer - Manage, share and transfer data collected in a useful, archived and easily obtainable format.

The division ensures that information about resource investigations, population status, harvest and public use is timely, current, accurate and available in a form that is useful.





## Wildlife Division

"Managing Wildlife...for the People"

Mission: To conserve for public benefit Missouri's wildlife resources and the landscapes on which wildlife depend, and to manage public lands to conserve and enhance their natural resources, provide vital ecosystem services, and invite public use and enjoyment.

#### Goals:

- Balance wildlife resource needs with public expectations.
- Advocate wildlife and biological diversity in conservation efforts.
- Actively seek ways to inform peers, cooperators and citizens about wildlife stewardship.
- Provide opportunity for all citizens to use, enjoy and learn about wildlife and their habitats.
- Manage 346 conservation areas that provide opportunities for citizens to recreate and enjoy the outdoors.
- Provide technical support for natural-community management and for life histories and locations for species of conservation concern.

**Programs:** Wildlife Division is responsible for the management of Missouri's wildlife resources and the habitats upon which they depend to best serve the long-term interests of the people of the state. Fulfilling this role involves a wide range of programs and activities on public, as well as private, land.

#### Strive for wildlife diversity through natural community management/restoration on MDC lands.

- Manage MDC's Wildlife Diversity program in a way that benefits the full range of MDC programs and Missouri landscapes.
- Continue support of the Missouri Natural Areas program.
- Continue to coordinate MDC's endangered species program.
- Restore natural communities on MDC lands, especially native grasslands and wetlands.
- Continue a renewed focus on the "active management" of wildlife habitats and plant/animal communities on MDC lands.
- Ensure that aquatic species are profiled in agency wildlife diversity efforts, especially the State Wildlife Grant and Landowner Incentive programs.
- Implement the directions outlined in MDC's Strategic Guidance for Northern Bobwhite Quail Recovery.
- Implement management programs on conservation lands that feature priority focus areas for bird conservation as outlined in Partners in Flight, Central Hardwoods Joint Venture, and Lower Mississippi Valley Joint Venture Bird Conservation plans, and Important Bird Area recommendations.

### Develop and strengthen effective conservation partnerships.

- Administer Missouri's Comprehensive Wildlife Strategy, an approach to conservation planning and implementation within a framework of partnerships to integrate conservation action for all wildlife statewide.
- Administer state wildlife grants to improve opportunities for MDC to work with conservation partners to conserve species with the greatest conservation needs.
- Continue to promote all bird conservation in Missouri through participation in the Missouri Bird Conservation Initiative, within the framework of 41 organizations and private citizen partners.
- Assemble the conservation partnerships necessary to secure grants and other funding for rehabilitation of wetland management structures on the oldest wetland management areas through the Golden Anniversary Wetlands initiative.

- Form partnerships with landowners for wildlife stewardship on private land through the Landowner Incentive program and provide technical support through personal landowner contacts.
- Continue to focus on grassland birds, especially prairie chickens, to enhance existing and future partnerships with communities near their habitat.

#### Coordinate MDC invasive species activities in conjunction with other affected/involved divisions.

- Integrate the coordination of invasive and exotic species control into agency Wildlife Diversity programs.
- Control invasive/exotic species on conservation lands, especially in natural communities, while taking actions where appropriate to control the introduction of new invasive/exotic species to MDC lands.

### Public Resources Management-MDC area facilities/infrastructures maintained and operated in a way that invites public use.

- Ensure that conservation area facilities are clean and operated in ways that welcome citizen visitors to the areas.
- Maintain infrastructures of all types in ways that enable them to meet their use expectations.
- Administer the Wildlife Restoration Grant in ways that provide federal support for operations, maintenance, habitat management and resource planning on conservation lands.
- Promote Adopt-A-Trail groups to help with trail maintenance.
- Develop mourning dove habitats as a means to attract doves and hunters to MDC lands, using FY05 results to improve program effectiveness and efficiency.
- Provide special recreational opportunities through deer, dove, turkey and waterfowl managed hunts.

#### Deer populations balanced with the interest and tolerance of landowners, hunters and the general public.

- Manage conservation area deer-hunting programs in ways that provide a range of hunting opportunities for deer hunters as outlined in the deer strategic direction statement.
- Ensure that deer populations on conservation areas do not create problems for neighbors.
- Assist private landowners with deer-harvest management programs on private lands.

#### Manage forests on MDC lands that promote forest health, sustainable wood products, wildlife habitat and ecosystem restoration.

- Continue efforts to assist Forestry Division staff in the attainment of agency timber-management objectives.
- Actively pursue opportunities to use timber harvests as a means to attain natural community restoration objectives, especially for oak-pine woodlands, savannas, glades and prairies.
- Assist Forestry in natural area management activities, such as prescribed burning, on Forestry areas.

# **Conservation by the Numbers**

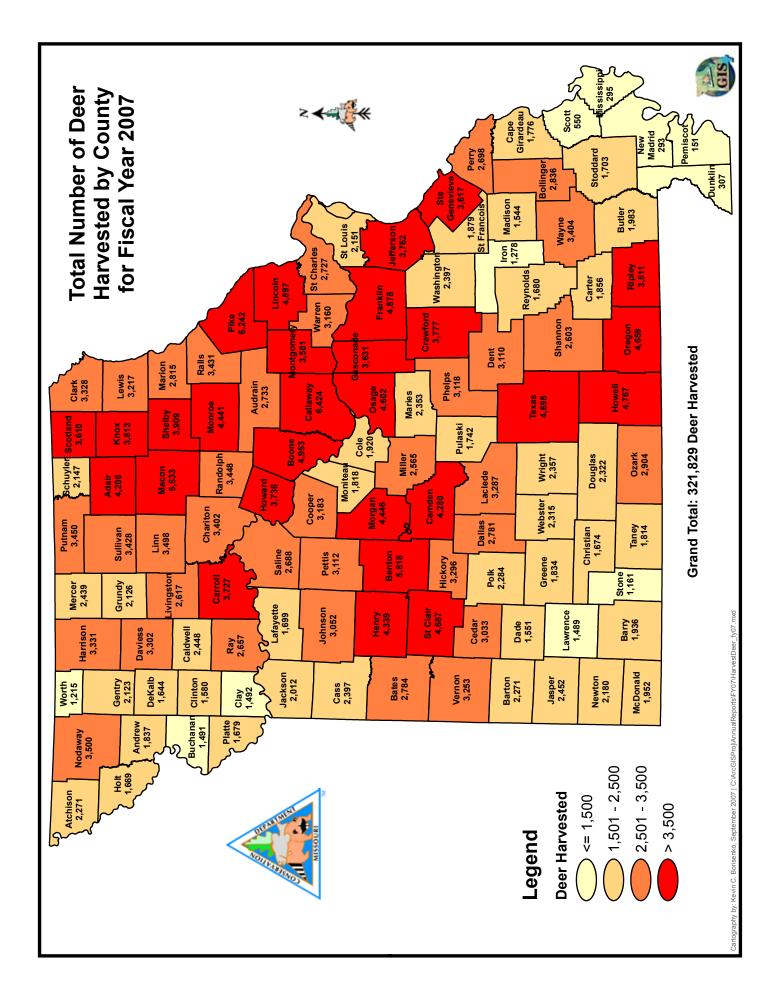
- ▲ Actual Funds Available and Disbursements
- ▲ Number of Deer Harvested by County
- ▲ Number of Turkeys Harvested by County
- ▲ Acres of Conservation Land by County
- ▲ Payment In-lieu of Taxes (PILT) by County
- ▲ County Aid Road Trust (CART) Program
- ▲ Capital Improvement Projects Funding by County
- ▲ Number of Deer and Turkey Permit Holders by County of Residence
- ▲ Number of Fishing Permit Holders by County of Residence
- ▲ Number of Small Game Permit Holders by County of Residence
- ▲ Number of Landowner Deer Permit Holders by County of Residence
- ▲ Number of Landowner Turkey Permit Holders by County of Residence

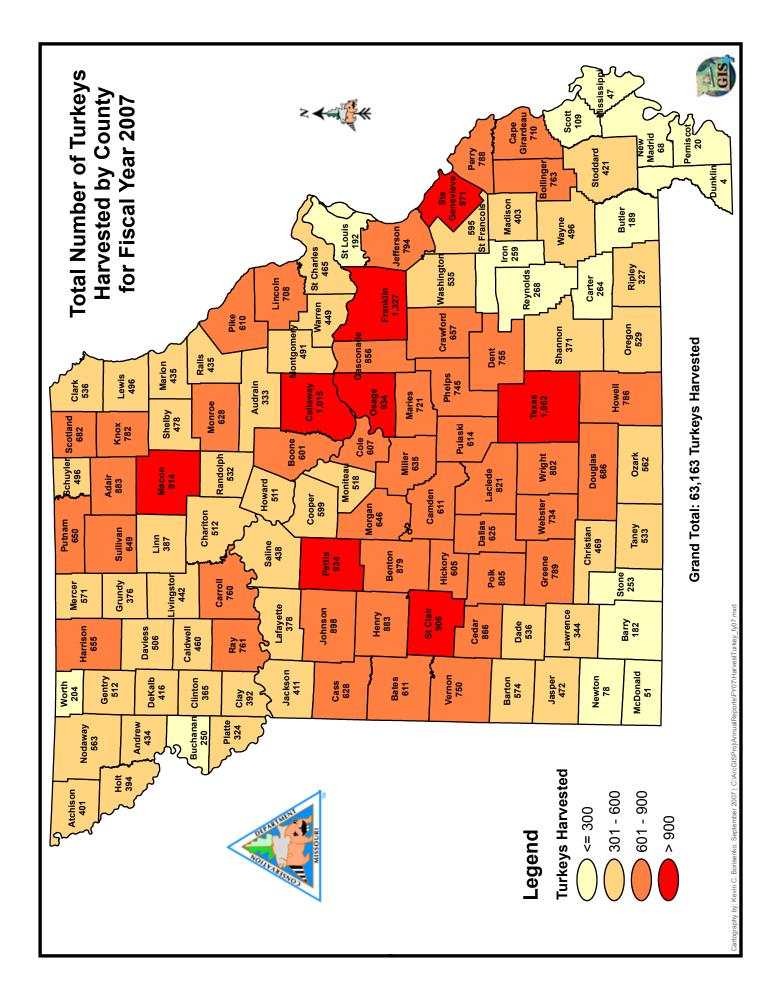
## MISSOURI DEPARTMENT OF CONSERVATION

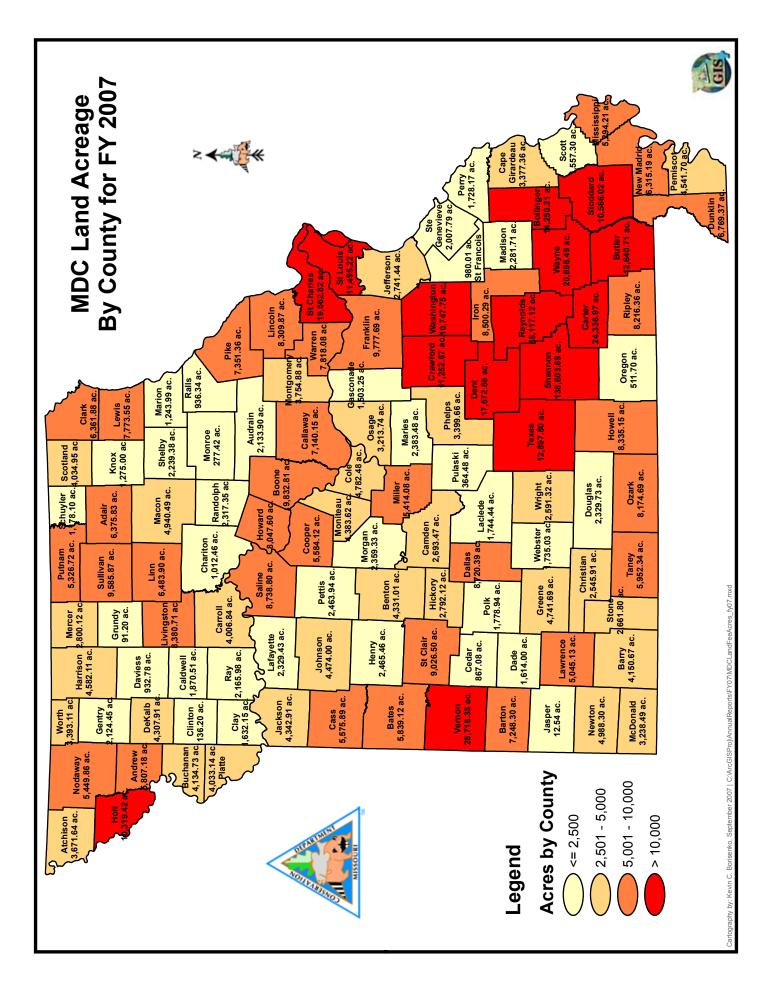
#### **Actual Funds Available and Disbursements** For Fiscal Year 2007

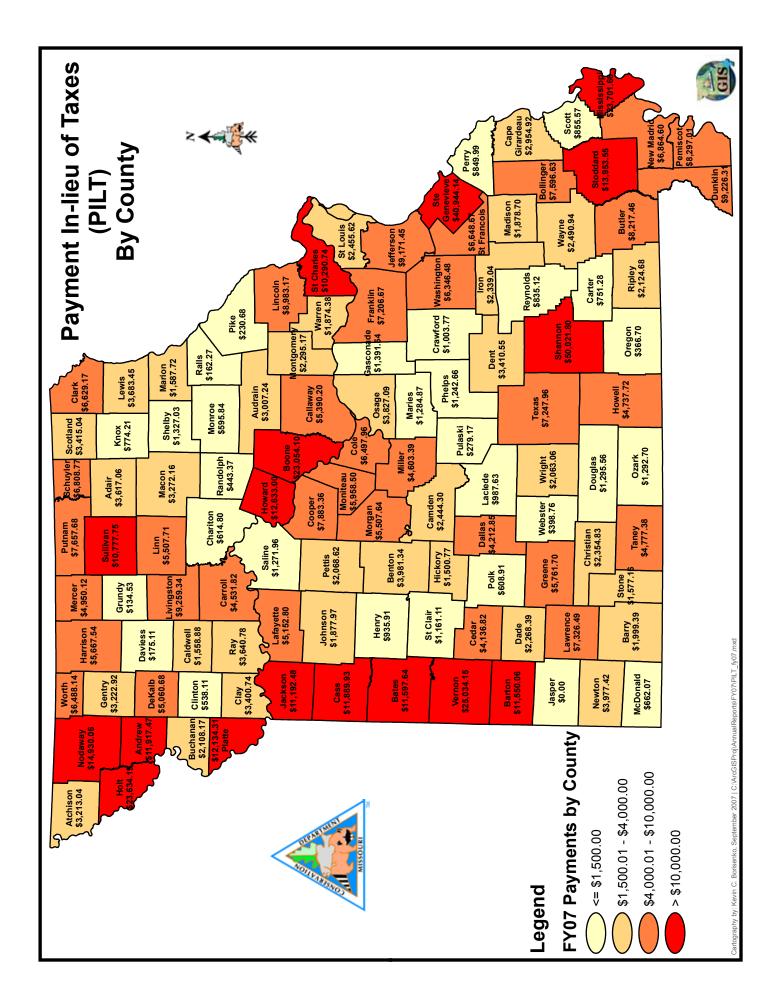
#### **RECEIPTS**

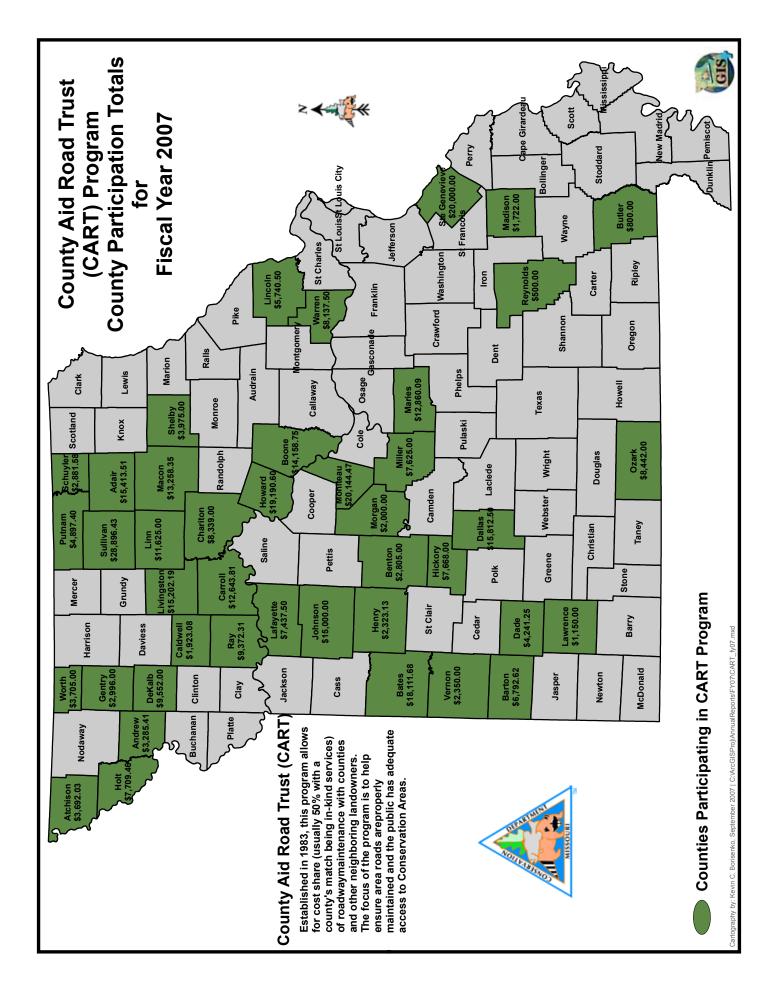
Sales Tax	\$102 222 575
Hunting, Fishing & Commercial Permit Sales	
Federal Reimbursements	, ,
Agricultural Sales	, ,
	, ,
Timber Sales	
Other Miscellaneous Receipts	
Miscellaneous Fees & Tags	
Surplus Property	
Interest	
Publication Sales	
Nursery Stock Sales	
Grants, Gifts, Bequests & Donations	
Contractual Services	, ,
Rentals	,
Miscellaneous Sales	,
Land Sales	
Yield Tax	,
Refunds	,
Damage Reimbursements	,
Concession Income	,
TOTAL RECEIPTS	. \$171,676,521
DISBURSEMENTS	
County Assistance Payments	1,396,405
Capital Improvements	
Fisheries	
Forestry	, ,
Wildlife	, ,
Outreach & Education	
Private Land Services	
Protection	14,181,263
Resource Science	
Regional Public Contact Offices	, ,
Administrative Services and Human Resources	
Design & Development	
Administration	
TOTAL DISBURSEMENTS	

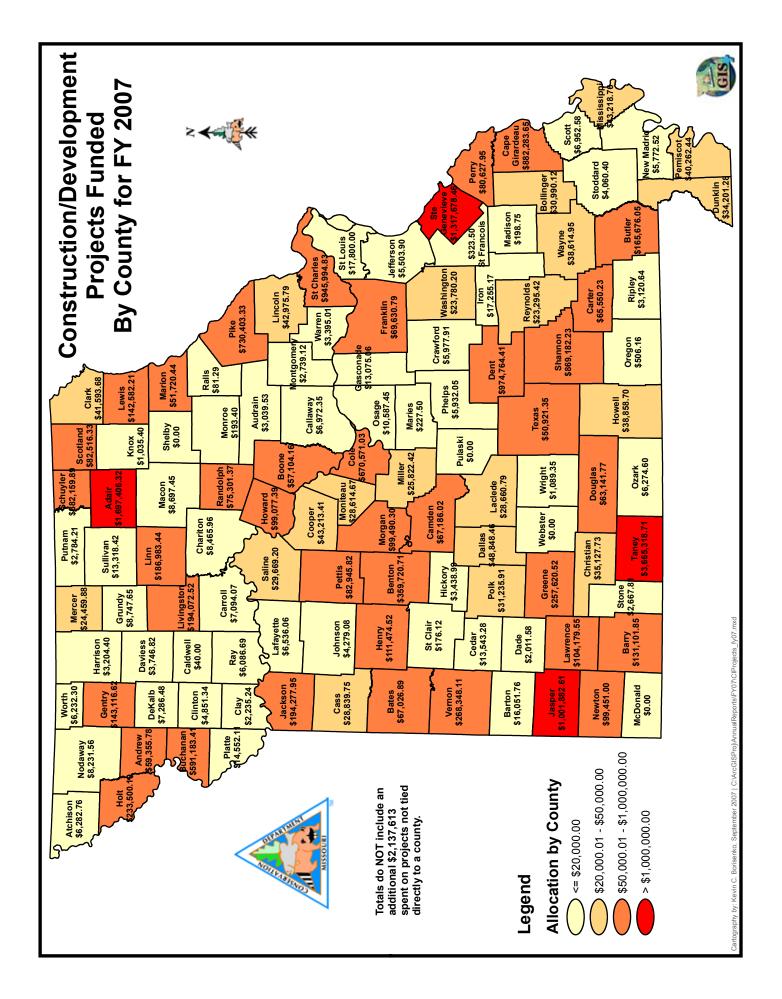


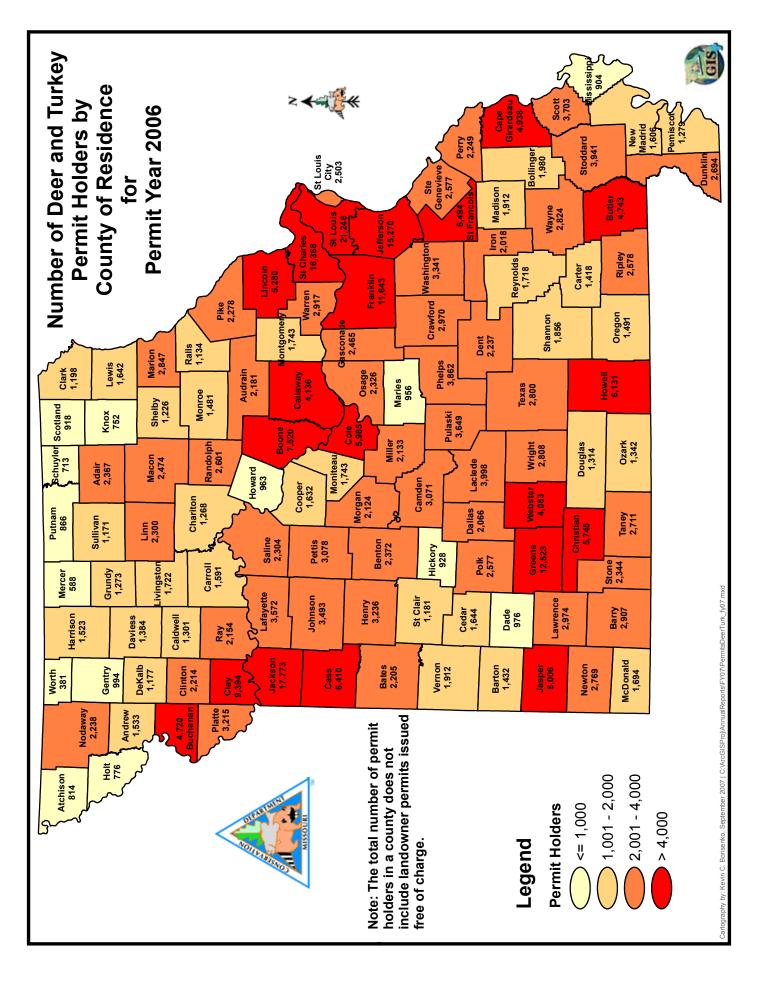


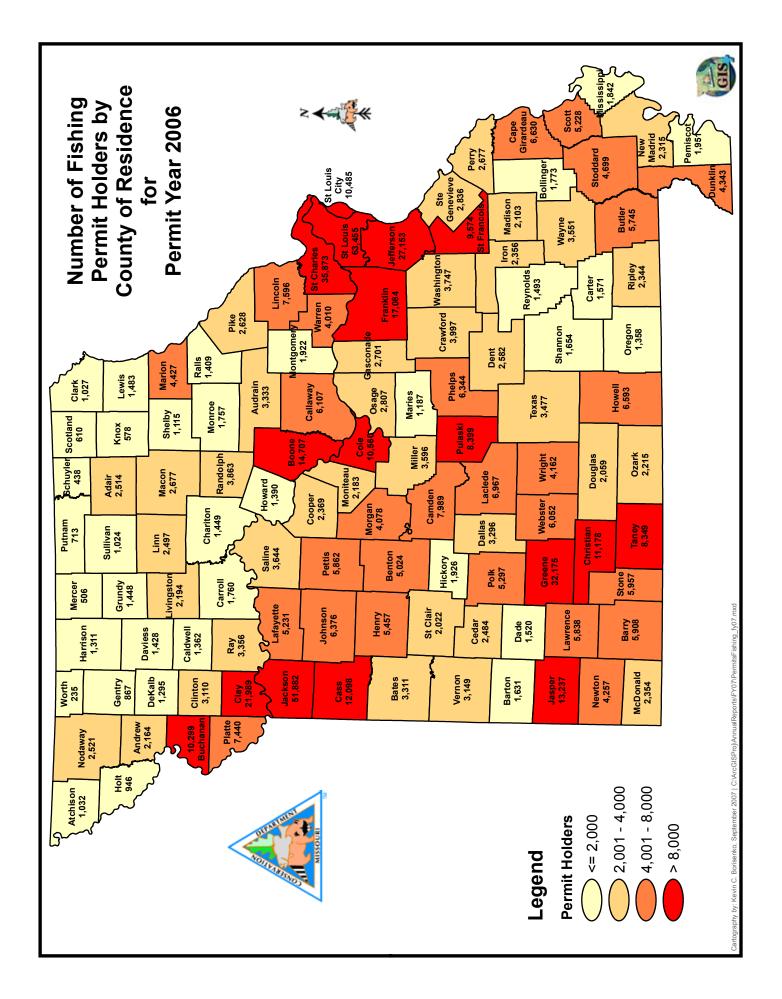


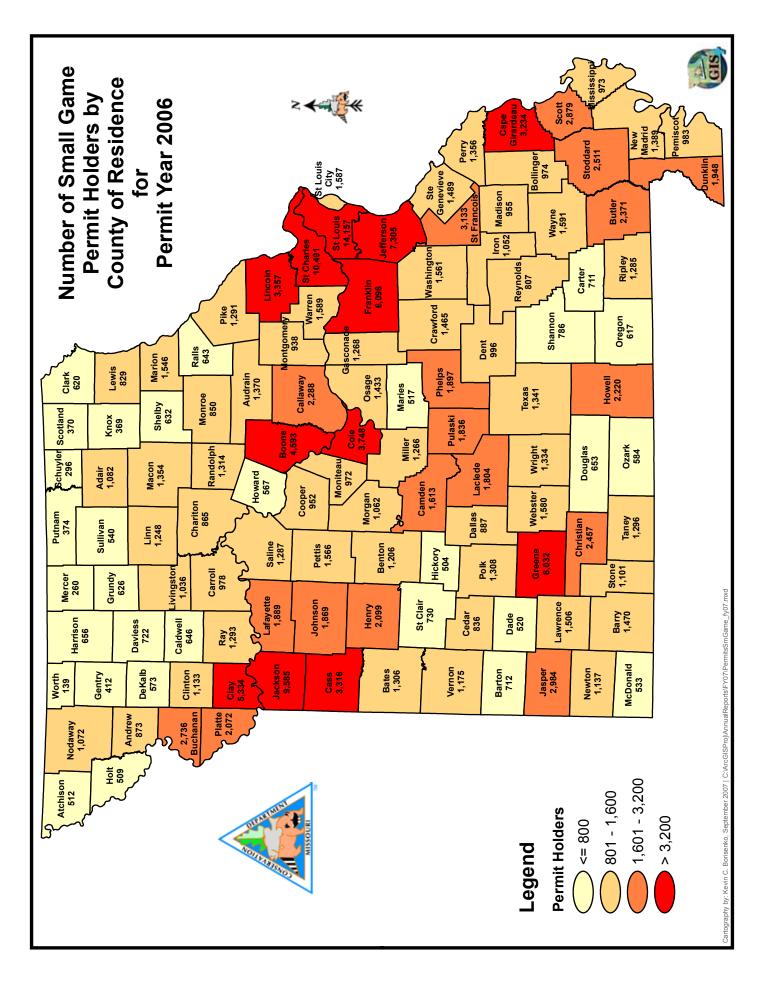


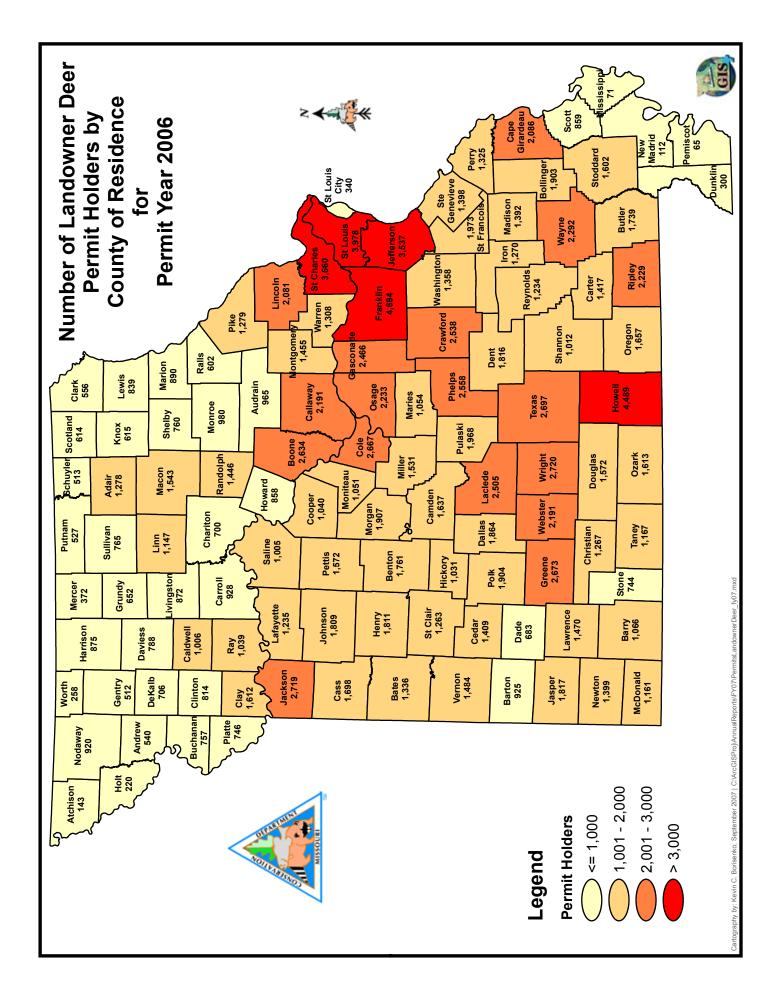


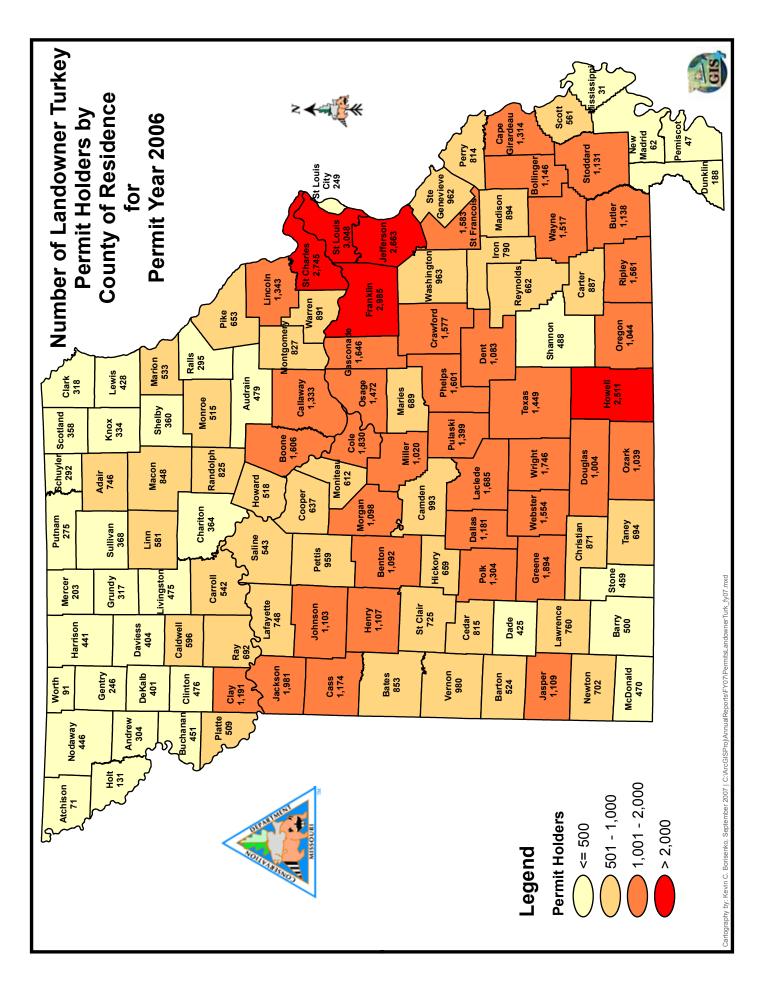












# Excellent public service is what we will provide.

Employees are the Department's most important resource.



All citizens are important; we value their trust and their point of view.

Fairness, objectivity, sound science, integrity and accountability will guide our actions.

Missourians are our partners to achieve conservation success.